

SEQUENCE LISTING

<110> Rosen, Craig A.
Haseltine, William A.

<120> Albumin Fusion Proteins

<130> PF574

<150> PCT/US02/40892
<151> 2002-12-23

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<151> 2001-12-21

<150> 60/360,000
<151> 2002-02-28

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<151> 2002-08-09

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903

<210> 14
<211> 1386
<212> DNA
<213> Homo sapiens

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<210> 15
<211> 501
<212> DNA
<213> Homo sapiens

<400> 15
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<210> 16
<211> 501
<212> DNA
<213> Homo sapiens

<400> 16
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<210> 17
 <211> 1386
 <212> DNA
 <213> Homo sapiens

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<210> 18
 <211> 816
 <212> DNA
 <213> Homo sapiens

<400> 18						
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<210> 19
 <211> 900
 <212> DNA
 <213> Homo sapiens

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gctgaaacag	gagaaaggct	ggtgtgtgct	cagtgtcctc	ctggaacatt	tgtgcaaagg	180
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gaagcaaggg	cttgtcatgc	aacacacaac	agggcatgta	ggtgtcgcac	aggcttcttt	360
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<210> 20
 <211> 900
 <212> DNA
 <213> Homo sapiens

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gaagcaaggg	cttgtcatgc	aacacacaac	agggcatgta	ggtgtcgcac	aggcttcttt	360
gctcatgctg	gattttgtct	ggaacacgct	tcttgtcctc	ctggtgctgg	agtgatcgct	420
cctggtacac	cctctcagaa	cacccaatgc	cagccctgtc	ctcctggcac	cttctctgca	480
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<210> 21
 <211> 813
 <212> DNA
 <213> Homo sapiens

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cgctctgtga	gggaacgctt	cctgcctgtg	cac			813

<210> 22
 <211> 78
 <212> DNA
 <213> Homo sapiens

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gatccagaag	gtggtggt					78

<210> 23
 <211> 78
 <212> DNA
 <213> Homo sapiens

ggtgatagat	tgcaactgtaa	gccacaaaga	caatctccat	ggatgaagtg	tcaacacttg	60
gatccagaag	gtggtggt					78

<210> 24
 <211> 78
 <212> DNA
 <213> Homo sapiens

ggtgatgatg	atgattgtgg	ttggattggt	ttcgctaact	tccacttgtg	tttgacagg	60
gatccagaag	gtggtggt					78

<210> 25
 <211> 78
 <212> DNA
 <213> Homo sapiens

ggtgatgatg	atgattgtgg	ttggattggt	ttcgctaact	tccacttgtg	tttgacagg	60
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<210> 26
 <211> 561
 <212> DNA
 <213> Homo sapiens


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<400> 26
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ctcctgtggc aattgaatgg gaggcttgaa tattgcctca aggacaggat gaactttgac 180
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cttacaggtt acctccgaaa c 561

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<210> 27
<211> 498
<212> DNA
<213> Homo sapiens

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<210> 28
<211> 561
<212> DNA
<213> Homo sapiens

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<400> 28
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tatgagatgc tccagaacat ctttgctatt ttcagacaag attcatctag cactggctgg 300
aatgagacta ttgttgagaa cctcctggct aatgtctatc atcagataaa ccatctgaag 360
acagtccctg aagaaaaact ggagaaagaa gatttcacca ggggaaaact catgagcagt 420
ctgcacctga aaagatatta tgggaggatt ctgcattacc tgaaggccaa ggagtacagt 480
cactgtgcct ggaccatagt cagagtggaa atcctaagga acttttactt cattaacaga 540
cttacaggtt acctccgaaa c 561

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<210> 29
<211> 501
<212> DNA
<213> Homo sapiens

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cctgaggaga ttaagcagct gcagcagttc cagaaggagg acgccgcatt gaccatctat 180
gagatgctcc agaacatctt tgctattttc agacaagatt catctagcac tggctggaat 240
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gtcctggaag	aaaaactgga	gaaagaagat	ttcaccaggg	gaaaactcat	gagcagtcctg	360
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tgtgcctgga	ccatagtcag	agtggaaatc	ctaaggaact	tttacttcat	taacagactt	480
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<210> 30
 <211> 501
 <212> DNA
 <213> Homo sapiens

<400> 30						
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<210> 31
 <211> 504
 <212> DNA
 <213> Homo sapiens

<400> 31						
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<210> 32
 <211> 504
 <212> DNA
 <213> Homo sapiens

<400> 32						
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<210> 33

<211> 504
 <212> DNA
 <213> Homo sapiens

<400> 33
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<400> 34
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 tactgtaact aa 192

<210> 36
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 <213> Homo sapiens

<400> 36
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 tactgtaact aa 192

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<211> 177
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<210> 38
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<400> 38
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 <212> DNA
 <213> Homo sapiens

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 <212> DNA
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<210> 42
 <211> 324
 <212> DNA
 <213> Homo sapiens

<400> 42
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<210> 43
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 <213> Homo sapiens

<400> 43
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<210> 44
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 <212> DNA
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<210> 45
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 <212> DNA
 <213> Homo sapiens

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<210> 46
 <211> 495
 <212> DNA
 <213> Homo sapiens

<400> 46
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<210> 47
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 <212> DNA
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<210> 48

<211> 1290

<212> DNA

<213> Homo sapiens

<400> 48

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<210> 49

<211> 1290

<212> DNA

<213> Homo sapiens

<400> 49

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<210> 50
 <211> 1290
 <212> DNA
 <213> Homo sapiens

<400> 50						
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<210> 52
<211> 1290
<212> DNA
<213> Homo sapiens

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<400> 52
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ctgggggtgc ctggaggtgg gctgcctgag cacaccttca acctgaagat gtttctggag    180
aacgtgaagg tggatttctt gcgcagcctt aacctgagtg gggtccttcc gcaggacaaa    240
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tcgactacgc cagcgtccaa cattgtgcgg agcttcagca tggaagatgc catctccata    360
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gccggggctg gcagccactg tcaaaagacc tccctgcggg taaacttcga ggacatcggc    1020
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<210> 53
<211> 1290
<212> DNA
<213> Homo sapiens

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<400> 53
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gaccctctc atgacctgaa aggaagcgtg gtcatttatg atgttctgga tggaacagat    540
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gacatcagtg	tccccccagg	ttccagaaac	ctgcccttct	ttgttggtct	ctccaatgac	780
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atctccgtcc	tctacaagga	tgacatgggg	gtgcccaccc	tcaagtacca	ttacgagggc	1260
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<210> 54

<211> 1290

<212> DNA

<213> Homo sapiens

<400> 54

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ctgggggtgc	ctggaggtgg	gctgcctgag	cacaccttca	acctgaagat	gtttctggag	180
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accagggtgg	agccgccgca	gtacatgatt	gacctgtaca	acaggtagac	gtccgataag	300
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ggctgggaga	ccttggaagt	gtccagcgcc	gtgaagcgct	gggtccggtc	cgactccacc	660
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gacatcagtg	tccccccagg	ttccagaaac	ctgcccttct	ttgttggtct	ctccaatgac	780
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atctccgtcc	tctacaagga	tgacatgggg	gtgcccaccc	tcaagtacca	ttacgagggc	1260
atgagcgtgg	cagagtgtgg	gtgcaggtag				1290

<210> 55

<211> 495

<212> DNA

<213> Homo sapiens

<400> 55

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cagcagatct	tcaatctctt	cagcacaaa	gactcatctg	ctgcttggga	tgagaccctc	240
ctagacaaat	ctacactga	actctaccag	cagctgaatg	acctggaagc	ctgtgtgata	300
caggggggtg	gggtgacaga	gactccccctg	atgaaggagg	actccattct	ggctgtgagg	360
aaatacttcc	aaagaatcac	tctctatctg	aaagagaaga	aatacagccc	ttgtgcctgg	420
gaggttgtca	gagcagaaat	catgagatct	ttttctttgt	caacaaactt	gcaagaaagt	480

ttaagaagta aggaa 495

<210> 56
<211> 495
<212> DNA
<213> Homo sapiens

<400> 56
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gaggagtttg gcaaccagtt ccaaaaggct gaaaccatcc ctgtcctcca tgagatgac 180
cagcagatct tcaatctctt cagcacaaag gactcatctg ctgcttgga tgagaccctc 240
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gaggttgta gagcagaaat catgagatct ttttctttgt caacaaactt gcaagaaagt 480
ttaagaagta aggaa 495

<210> 57
<211> 1041
<212> DNA
<213> Homo sapiens

<400> 57
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gatgacggat gctccccgaa caagatgaag acagtgaagt gcgcgccggg cgtggacgtc 180
tgcaccgagg ccgtggggggc ggtggagacc atccacggac aattctcgct ggcagtgcgg 240
ggttgcggtt cgggactccc cggcaagaat gaccgcggcc tggatcttca cgggcttctg 300
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gctggccacc aggaccgcag caattcaggg cagtatcctg caaaaggggg gccccagcag 960
cccataata aaggctgtgt ggctcccaca gctggattgg cagcccttct gttggccgtg 1020
gctgctggtg tcctactgtg a 1041

<210> 58
<211> 1041
<212> DNA
<213> Homo sapiens

<400> 58
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gatgacggat gctccccgaa caagatgaag acagtgaagt gcgcgccggg cgtggacgtc 180
tgcaccgagg ccgtggggggc ggtggagacc atccacggac aattctcgct ggcagtgcgg 240
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gcgttcatcc agctgcagca atgcgctcag gatcgctgca acgccaagct caacctcacc 360
tcgcggggcg tcgacccggc aggtaatgag agtgcatacc cgcccaacgg cgtggagtgc 420

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gcagctaattg	tgactgtgtc	cttgccctgtc	cggggctgtg	tccaggatga	attctgcact	600
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gccccagtg	gacccacatc	caccacccaaa	cccatgccag	cgccaaccag	tcagactccg	840
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gctggccacc	aggaccgcag	caattcaggg	cagtatcctg	caaaaggggg	gccccagcag	960
ccccataata	aaggctgtgt	ggctcccaca	gctggattgg	cagcccttct	gttggccggtg	1020
gctgctgggtg	tcctactgtg	a				1041

<210> 59
 <211> 495
 <212> DNA
 <213> Homo sapiens

<400> 59						
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cagcagatct	tcaatctctt	cagcacaaa	gactcatctg	ctgcttgga	tgagacctc	240
ctagacaaat	tctacactga	actctaccag	cagctgaatg	acctggaagc	ctgtgtgata	300
caggggggtg	gggtgacaga	gactcccctg	atgaaggagg	actccattct	ggctgtgagg	360
aaatacttcc	aaagaatcac	tctctatctg	aaagagaaga	aatacagccc	ttgtgcctgg	420
gaggttgatca	gagcagaaat	catgagatct	ttttctttgt	caacaaactt	gcaagaaaagt	480
ttaagaagta	aggaa					495

<210> 60
 <211> 543
 <212> DNA
 <213> Homo sapiens

<400> 60						
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gactacagca	agtatctgga	ctccaggcgt	gccaagatt	ttgtgcagtg	gttgatgaat	240
accaagagga	acaggaataa	cattgccaaa	cgtcacgatg	aatttgagag	acatgctgaa	300
gggaccttta	ccagtgatgt	aagttcttat	ttggaaggcc	aagctgccaa	ggaattcatt	360
gcttggctgg	tgaaaggccg	aggaaggcga	gatttcccag	aagaggtcgc	cattgttgaa	420
gaacttggcc	gcagacatgc	tgatggttct	ttctctgatg	agatgaacac	cattcttgat	480
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t						543

<210> 61
 <211> 543
 <212> DNA
 <213> Homo sapiens

<400> 61						
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cgttccccttc	aagacacaga	ggagaaatcc	agatcattct	cagcttccca	ggcagaccca	120
ctcagtgatc	ctgatcagat	gaacgaggac	aagcgccatt	cacagggcac	attcaccagt	180
gactacagca	agtatctgga	ctccaggcgt	gccaagatt	ttgtgcagtg	gttgatgaat	240

accaagagga	acaggaataa	cattgccaaa	cgtcacgatg	aatttgagag	acatgctgaa	300
gggaccttta	ccagtgatgt	aagttcttat	ttggaaggcc	aagctgccaa	ggaattcatt	360
gcttggctgg	tgaaaggccg	aggaaggcga	gatttcccag	aagaggctcg	cattgttgaa	420
gaacttggcc	gcagacatgc	tgatggttct	ttctctgatg	agatgaacac	cattcttgat	480
aatcttgccg	ccagggactt	tataaactgg	ttgattcaga	ccaaaatcac	tgacaggaaa	540
taa						543

<210> 62
 <211> 543
 <212> DNA
 <213> Homo sapiens

<400> 62						
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ctcagtgatc	ctgatcagat	gaacgaggac	aagcgccatt	cacagggcac	attcaccagt	180
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gaacttggcc	gcagacatgc	tgatggttct	ttctctgatg	agatgaacac	cattcttgat	480
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taa						543

<210> 63
 <211> 543
 <212> DNA
 <213> Homo sapiens

<400> 63						
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gaacttggcc	gcagacatgc	tgatggttct	ttctctgatg	agatgaacac	cattcttgat	480
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taa						543

<210> 64
 <211> 264
 <212> DNA
 <213> Homo sapiens

<400> 64						
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tttgcttcga	agattaagcg	acatgggtgaa	ggaacattta	ccagtgactt	gtcaaaacag	180
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ggggcacctc	cgccatcggg	ttaa				264

<210> 65
 <211> 264
 <212> DNA
 <213> Homo sapiens

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<400> 65
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tttgcttcga agattaagcg acatggtgaa ggaacattta ccagtgactt gtcaaaacag 180
atggaagagg aggcagtgcg gttattttatt gagtggctta agaacggagg accaagtagc 240
ggggcacctc cgccatcggg ttaa 264

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<210> 66
<211> 330
<212> DNA
<213> Homo sapiens

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<400> 66
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tgcttcttcc ccttggctga cgatgtgacg ccgacgaaac acgctatcgt gcagaccctg 180
gtgcatctca agttccccac aaagggtggc aaggcctgct gtgtgcccac caaactgagc 240
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ggcatgagcg tggcagagtg tgggtgcagg 330

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<210> 67
<211> 411
<212> DNA
<213> Homo sapiens

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<400> 67
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gacttcaacc tcctgcaggt ctcggagccc tcggagccat gtgtgagata cctgcccagg 180
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cccccggtgt ggaaagtggc ccaggtagat tccttgaagg acaaagcacg gaagctgtac 300
accatcatga actcgttctg caggagagat ttggtattcc tgttggatga ctgcaatgcc 360
ttggaatacc caatcccagt gactacggtc ctgccagatc gtcagcgcta a 411

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<210> 68
<211> 411
<212> DNA
<213> Homo sapiens

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<400> 68
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cggcccactc ccccgacctg ctactcccgc atgcggggcc tgagccagga gatcaccgcg 120
gacttcaacc tcctgcaggt ctcggagccc tcggagccat gtgtgagata cctgcccagg 180
ctgtacctgg acatacacia ttactgtgtg ctggacaagc tgcgggactt tgtggcctcg 240
cccccggtgt ggaaagtggc ccaggtagat tccttgaagg acaaagcacg gaagctgtac 300
accatcatga actcgttctg caggagagat ttggtattcc tgttggatga ctgcaatgcc 360
ttggaatacc caatcccagt gactacggtc ctgccagatc gtcagcgcta a 411

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<210> 69
<211> 561
<212> DNA
<213> Homo sapiens

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<400> 69
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tccatgagct	acaacttgct	tggattccta	caaagaagca	gcaattttca	gtgtcagaag	120
ctcctgtggc	aattgaatgg	gaggcttgaa	tattgcctca	aggacaggat	gaactttgac	180
atccctgagg	agattaagca	gctgcagcag	ttccagaagg	aggacgccgc	attgaccatc	240
tatgagatgc	tccagaacat	ctttgctatt	ttcagacaag	attcatctag	cactggctgg	300
aatgagacta	ttgttgagaa	cctcctggct	aatgtctatc	atcagataaa	ccatctgaag	360
acagtcctgg	aagaaaaact	ggagaaagaa	gatttcacca	ggggaaaact	catgagcagt	420
ctgcacctga	aaagatatta	tgggaggatt	ctgcattacc	tgaaggccaa	ggagtacagt	480
cactgtgcct	ggaccatagt	cagagtggaa	atcctaagga	acttttactt	cattaacaga	540
cttacagggt	acctccgaaa	c				561

<210> 70
 <211> 880
 <212> PRT
 <213> Homo sapiens

<400> 70
 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15

Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30

His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45

Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60

Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
 65 70 75 80

Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
 85 90 95

Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
 100 105 110

Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
 115 120 125

His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
 130 135 140

Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
 145 150 155 160

Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
 165 170 175

Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
 180 185 190

Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu
 195 200 205

Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys

210	215	220
Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val 225 230 235 240		
Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser 245 250 255		
Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly 260 265 270		
Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile 275 280 285		
Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu 290 295 300		
Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp 305 310 315 320		
Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser 325 330 335		
Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly 340 345 350		
Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val 355 360 365		
Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys 370 375 380		
Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu 385 390 395 400		
Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys 405 410 415		
Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu 420 425 430		
Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val 435 440 445		
Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His 450 455 460		
Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val 465 470 475 480		
Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg 485 490 495		
Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe 500 505 510		
Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala		

515					520					525					
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu
530						535					540				
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys
545					550					555					560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala
				565					570					575	
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe
			580					585					590		
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly
			595				600					605			
Leu	Val	Ala	Glu	Thr	Pro	Thr	Tyr	Pro	Trp	Arg	Asp	Ala	Glu	Thr	Gly
			610			615					620				
Glu	Arg	Leu	Val	Cys	Ala	Gln	Cys	Pro	Pro	Gly	Thr	Phe	Val	Gln	Arg
625					630					635					640
Pro	Cys	Arg	Arg	Asp	Ser	Pro	Thr	Thr	Cys	Gly	Pro	Cys	Pro	Pro	Arg
				645					650					655	
His	Tyr	Thr	Gln	Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	Tyr	Cys	Asn
			660					665					670		
Val	Leu	Cys	Gly	Glu	Arg	Glu	Glu	Glu	Ala	Arg	Ala	Cys	His	Ala	Thr
			675				680					685			
His	Asn	Arg	Ala	Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	His	Ala	Gly
	690					695					700				
Phe	Cys	Leu	Glu	His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	Val	Ile	Ala
705					710					715					720
Pro	Gly	Thr	Pro	Ser	Gln	Asn	Thr	Gln	Cys	Gln	Pro	Cys	Pro	Pro	Gly
				725					730					735	
Thr	Phe	Ser	Ala	Ser	Ser	Ser	Ser	Ser	Ser	Glu	Gln	Cys	Gln	Pro	His
			740					745						750	
Asn	Cys	Thr	Ala	Leu	Gly	Leu	Ala	Leu	Asn	Val	Pro	Gly	Ser	Ser	Ser
			755				760					765			
His	Asp	Thr	Leu	Cys	Thr	Ser	Cys	Thr	Gly	Phe	Pro	Leu	Ser	Thr	Arg
	770					775					780				
Val	Pro	Gly	Ala	Glu	Glu	Cys	Glu	Arg	Ala	Val	Ile	Asp	Phe	Val	Ala
785					790					795					800
Phe	Gln	Asp	Ile	Ser	Ile	Lys	Arg	Leu	Gln	Arg	Leu	Leu	Gln	Ala	Leu
				805					810					815	
Glu	Ala	Pro	Glu	Gly	Trp	Gly	Pro	Thr	Pro	Arg	Ala	Gly	Arg	Ala	Ala

	820		825		830										
Leu	Gln	Leu	Lys	Leu	Arg	Arg	Arg	Leu	Thr	Glu	Leu	Leu	Gly	Ala	Gln
	835						840					845			
Asp	Gly	Ala	Leu	Leu	Val	Arg	Leu	Leu	Gln	Ala	Leu	Arg	Val	Ala	Arg
	850					855					860				
Met	Pro	Gly	Leu	Glu	Arg	Ser	Val	Arg	Glu	Arg	Phe	Leu	Pro	Val	His
865					870					875					880

<210> 71
 <211> 874
 <212> PRT
 <213> Homo sapiens

<400> 71
Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15
Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
20 25 30
His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
35 40 45
Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
50 55 60
Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
65 70 75 80
Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
85 90 95
Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
100 105 110
Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
115 120 125
His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
130 135 140
Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
145 150 155 160
Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
165 170 175
Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
180 185 190
Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu
195 200 205

Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	
210						215					220					
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	
225					230					235					240	
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	
				245					250					255		
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	
			260					265					270			
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	
		275					280					285				
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	
290						295					300					
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	
305					310					315					320	
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	
				325					330					335		
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	
			340					345					350			
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	
		355					360					365				
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	
370						375					380					
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	
385					390					395					400	
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	
				405					410					415		
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	
			420					425					430			
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	
		435					440					445				
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	
450						455					460					
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	
465					470					475					480	
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	
				485					490					495		
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	
			500					505					510			

Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Val Ala Glu Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly
 610 615 620
 Glu Arg Leu Val Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg
 625 630 635 640
 Pro Cys Arg Arg Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg
 645 650 655
 His Tyr Thr Gln Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn
 660 665 670
 Val Leu Cys Gly Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr
 675 680 685
 His Asn Arg Ala Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly
 690 695 700
 Phe Cys Leu Glu His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala
 705 710 715 720
 Pro Gly Thr Pro Ser Gln Asn Thr Gln Cys Gln Pro Cys Pro Pro Gly
 725 730 735
 Thr Phe Ser Ala Ser Ser Ser Ser Ser Glu Gln Cys Gln Pro His Arg
 740 745 750
 Asn Cys Thr Ala Leu Gly Leu Ala Leu Asn Val Pro Gly Ser Ser Ser
 755 760 765
 His Asp Thr Leu Cys Thr Ser Cys Thr Gly Phe Pro Leu Ser Thr Arg
 770 775 780
 Val Pro Gly Ala Glu Glu Cys Glu Arg Ala Val Ile Asp Phe Val Ala
 785 790 795 800
 Phe Gln Asp Ile Ser Ile Lys Arg Leu Gln Arg Leu Leu Gln Ala Leu
 805 810 815

Glu Ala Pro Glu Gly Trp Gly Pro Thr Pro Arg Ala Gly Arg Ala Ala
 820 825 830
 Leu Gln Leu Lys Leu Arg Arg Arg Leu Thr Glu Leu Leu Gly Ala Gln
 835 840 845
 Asp Gly Ala Leu Leu Val Arg Leu Leu Gln Ala Leu Arg Val Ala Arg
 850 855 860
 Met Pro Gly Leu Glu Arg Ser Val Arg Glu
 865 870

<210> 72
 <211> 868
 <212> PRT
 <213> Homo sapiens

<400> 72
 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30
 His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45
 Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60
 Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
 65 70 75 80
 Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
 85 90 95
 Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
 100 105 110
 Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
 115 120 125
 His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
 130 135 140
 Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
 145 150 155 160
 Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
 165 170 175
 Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
 180 185 190
 Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu
 195 200 205

Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys
 210 215 220
 Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val
 225 230 235 240
 Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser
 245 250 255
 Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly
 260 265 270
 Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile
 275 280 285
 Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu
 290 295 300
 Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp
 305 310 315 320
 Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser
 325 330 335
 Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly
 340 345 350
 Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val
 355 360 365
 Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 370 375 380
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 385 390 395 400
 Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
 405 410 415
 Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
 420 425 430
 Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
 435 440 445
 Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
 450 455 460
 Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
 465 470 475 480
 Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
 485 490 495
 Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
 500 505 510

Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Val Ala Glu Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly
 610 615 620
 Glu Arg Leu Val Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg
 625 630 635 640
 Pro Cys Arg Arg Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg
 645 650 655
 His Tyr Thr Gln Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn
 660 665 670
 Val Leu Cys Gly Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr
 675 680 685
 His Asn Arg Ala Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly
 690 695 700
 Phe Cys Leu Glu His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala
 705 710 715 720
 Pro Gly Thr Pro Ser Gln Asn Thr Gln Cys Gln Pro Cys Pro Pro Gly
 725 730 735
 Thr Phe Ser Ala Ser Ser Ser Ser Ser Glu Gln Cys Gln Pro His Arg
 740 745 750
 Asn Cys Thr Ala Leu Gly Leu Ala Leu Asn Val Pro Gly Ser Ser Ser
 755 760 765
 His Asp Thr Leu Cys Thr Ser Cys Thr Gly Phe Pro Leu Ser Thr Arg
 770 775 780
 Val Pro Gly Ala Glu Glu Cys Glu Arg Ala Val Ile Asp Phe Val Ala
 785 790 795 800
 Phe Gln Asp Ile Ser Ile Lys Arg Leu Gln Arg Leu Leu Gln Ala Leu
 805 810 815

Glu Ala Pro Glu Gly Trp Gly Pro Thr Pro Arg Ala Gly Arg Ala Ala
 820 825 830
 Leu Gln Leu Lys Leu Arg Arg Arg Leu Thr Glu Leu Leu Gly Ala Gln
 835 840 845
 Asp Gly Ala Leu Leu Val Arg Leu Leu Gln Ala Leu Arg Val Ala Arg
 850 855 860
 Met Pro Gly Leu
 865

<210> 73
 <211> 864
 <212> PRT
 <213> Homo sapiens

<400> 73
 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30
 His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45
 Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60
 Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
 65 70 75 80
 Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
 85 90 95
 Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
 100 105 110
 Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
 115 120 125
 His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
 130 135 140
 Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
 145 150 155 160
 Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
 165 170 175
 Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
 180 185 190
 Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu

195					200					205					
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
225					230					235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245					250					255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly
			260					265						270	
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile
	275						280					285			
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu
	290					295					300				
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp
305					310					315					320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser
				325					330					335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly
			340					345					350		
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val
	355						360					365			
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys
	370					375					380				
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu
385					390					395					400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys
				405					410					415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu
			420					425					430		
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val
		435					440					445			
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His
	450					455					460				
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val
465					470					475					480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg
				485					490					495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe

500					505					510					
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala
		515					520					525			
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu
		530					535					540			
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys
												555			560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala
															575
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe
															590
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly
															605
Leu	Val	Ala	Glu	Thr	Pro	Thr	Tyr	Pro	Trp	Arg	Asp	Ala	Glu	Thr	Gly
															620
Glu	Arg	Leu	Val	Cys	Ala	Gln	Cys	Pro	Pro	Gly	Thr	Phe	Val	Gln	Arg
															640
Pro	Cys	Arg	Arg	Asp	Ser	Pro	Thr	Thr	Cys	Gly	Pro	Cys	Pro	Pro	Arg
															655
His	Tyr	Thr	Gln	Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	Tyr	Cys	Asn
															670
Val	Leu	Cys	Gly	Glu	Arg	Glu	Glu	Glu	Ala	Arg	Ala	Cys	His	Ala	Thr
															685
His	Asn	Arg	Ala	Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	His	Ala	Gly
															700
Phe	Cys	Leu	Glu	His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	Val	Ile	Ala
															720
Pro	Gly	Thr	Pro	Ser	Gln	Asn	Thr	Gln	Cys	Gln	Pro	Cys	Pro	Pro	Gly
															735
Thr	Phe	Ser	Ala	Ser	Ser	Ser	Ser	Ser	Glu	Gln	Cys	Gln	Pro	His	Arg
															750
Asn	Cys	Thr	Ala	Leu	Gly	Leu	Ala	Leu	Asn	Val	Pro	Gly	Ser	Ser	Ser
															765
His	Asp	Thr	Leu	Cys	Thr	Ser	Cys	Thr	Gly	Phe	Pro	Leu	Ser	Thr	Arg
															780
Val	Pro	Gly	Ala	Glu	Glu	Cys	Glu	Arg	Ala	Val	Ile	Asp	Phe	Val	Ala
															800
Phe	Gln	Asp	Ile	Ser	Ile	Lys	Arg	Leu	Gln	Arg	Leu	Leu	Gln	Ala	Leu

			805						810					815	
Glu	Ala	Pro	Glu	Gly	Trp	Gly	Pro	Thr	Pro	Arg	Ala	Gly	Arg	Ala	Ala
			820					825					830		
Leu	Gln	Leu	Lys	Leu	Arg	Arg	Arg	Leu	Thr	Glu	Leu	Leu	Gly	Ala	Gln
			835				840					845			
Asp	Gly	Ala	Leu	Leu	Val	Arg	Leu	Leu	Gln	Ala	Leu	Arg	Val	Ala	Arg
	850					855						860			

<210> 74
 <211> 880
 <212> PRT
 <213> Homo sapiens

<400> 74															
Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					.40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
	65				70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
	145				150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			

Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	210	215	220
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	225	230	235
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	245	250	255
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	260	265	270
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	275	280	285
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	290	295	300
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	305	310	315
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	325	330	335
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	340	345	350
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	355	360	365
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	370	375	380
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	385	390	395
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	405	410	415
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	420	425	430
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	435	440	445
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	450	455	460
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	465	470	475
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	485	490	495
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	500	505	510

Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Val Ala Glu Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly
 610 615 620
 Glu Arg Leu Val Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg
 625 630 635 640
 Pro Cys Arg Arg Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg
 645 650 655
 His Tyr Thr Gln Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn
 660 665 670
 Val Leu Cys Gly Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr
 675 680 685
 His Asn Arg Ala Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly
 690 695 700
 Phe Cys Leu Glu His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala
 705 710 715 720
 Pro Gly Thr Pro Ser Gln Asn Thr Gln Cys Gln Pro Cys Pro Pro Gly
 725 730 735
 Thr Phe Ser Ala Ser Ser Ser Ser Ser Glu Gln Cys Gln Pro His Arg
 740 745 750
 Asn Cys Thr Ala Leu Gly Leu Ala Leu Asn Val Pro Gly Ser Ser Ser
 755 760 765
 His Asp Thr Leu Cys Thr Ser Cys Thr Gly Phe Pro Leu Ser Thr Arg
 770 775 780
 Val Pro Gly Ala Glu Glu Cys Glu Arg Ala Val Ile Asp Phe Val Ala
 785 790 795 800
 Phe Gln Asp Ile Ser Ile Lys Arg Leu Gln Arg Leu Leu Gln Ala Leu
 805 810 815

Glu	Ala	Pro	Glu	Gly	Trp	Gly	Pro	Thr	Pro	Arg	Ala	Gly	Arg	Ala	Ala	
			820					825					830			
Leu	Gln	Leu	Lys	Leu	Arg	Arg	Arg	Leu	Thr	Glu	Leu	Leu	Gly	Ala	Gln	
		835					840					845				
Asp	Gly	Ala	Leu	Leu	Val	Arg	Leu	Leu	Gln	Ala	Leu	Arg	Val	Ala	Arg	
	850					855					860					
Met	Pro	Gly	Leu	Glu	Arg	Ser	Val	Arg	Glu	Arg	Phe	Leu	Pro	Val	His	
865					870					875					880	

<210> 75
 <211> 880
 <212> PRT
 <213> Homo sapiens

<400> 75																
Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala	
1				5					10					15		
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Val	Ala	Glu	Thr	Pro	Thr	Tyr	Pro	
			20					25					30			
Trp	Arg	Asp	Ala	Glu	Thr	Gly	Glu	Arg	Leu	Val	Cys	Ala	Gln	Cys	Pro	
		35					40					45				
Pro	Gly	Thr	Phe	Val	Gln	Arg	Pro	Cys	Arg	Arg	Asp	Ser	Pro	Thr	Thr	
	50					55					60					
Cys	Gly	Pro	Cys	Pro	Pro	Arg	His	Tyr	Thr	Gln	Phe	Trp	Asn	Tyr	Leu	
65					70					75					80	
Glu	Arg	Cys	Arg	Tyr	Cys	Asn	Val	Leu	Cys	Gly	Glu	Arg	Glu	Glu	Glu	
				85					90					95		
Ala	Arg	Ala	Cys	His	Ala	Thr	His	Asn	Arg	Ala	Cys	Arg	Cys	Arg	Thr	
			100					105					110			
Gly	Phe	Phe	Ala	His	Ala	Gly	Phe	Cys	Leu	Glu	His	Ala	Ser	Cys	Pro	
		115					120					125				
Pro	Gly	Ala	Gly	Val	Ile	Ala	Pro	Gly	Thr	Pro	Ser	Gln	Asn	Thr	Gln	
	130					135					140					
Cys	Gln	Pro	Cys	Pro	Pro	Gly	Thr	Phe	Ser	Ala	Ser	Ser	Ser	Ser	Ser	
145					150					155					160	
Glu	Gln	Cys	Gln	Pro	His	Arg	Asn	Cys	Thr	Ala	Leu	Gly	Leu	Ala	Leu	
				165					170					175		
Asn	Val	Pro	Gly	Ser	Ser	Ser	His	Asp	Thr	Leu	Cys	Thr	Ser	Cys	Thr	
		180						185					190			
Gly	Phe	Pro	Leu	Ser	Thr	Arg	Val	Pro	Gly	Ala	Glu	Glu	Cys	Glu	Arg	
		195					200					205				

Ala	Val	Ile	Asp	Phe	Val	Ala	Phe	Gln	Asp	Ile	Ser	Ile	Lys	Arg	Leu	210	215	220
Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu	Ala	Pro	Glu	Gly	Trp	Gly	Pro	Thr	225	230	235
Pro	Arg	Ala	Gly	Arg	Ala	Ala	Leu	Gln	Leu	Lys	Leu	Arg	Arg	Arg	Leu	245	250	255
Thr	Glu	Leu	Leu	Gly	Ala	Gln	Asp	Gly	Ala	Leu	Leu	Val	Arg	Leu	Leu	260	265	270
Gln	Ala	Leu	Arg	Val	Ala	Arg	Met	Pro	Gly	Leu	Glu	Arg	Ser	Val	Arg	275	280	285
Glu	Arg	Phe	Leu	Pro	Val	His	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	290	295	300
Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	305	310	315
Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	325	330	335
Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	340	345	350
Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	355	360	365
Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	370	375	380
Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	385	390	395
Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	405	410	415
Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	420	425	430
Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	435	440	445
Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	450	455	460
Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	465	470	475
Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	485	490	495
Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	500	505	510

Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	515	520	525
Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	530	535	540
Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	545	550	555
Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	565	570	575
Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	580	585	590
Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	595	600	605
Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	610	615	620
Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	625	630	635
Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	645	650	655
Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	660	665	670
Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	675	680	685
Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	690	695	700
Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	705	710	715
Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	725	730	735
Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	740	745	750
Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	755	760	765
Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	770	775	780
Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	785	790	795
Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	805	810	815

Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro
 820 825 830
 Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala
 835 840 845
 Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala
 850 855 860
 Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 865 870 875 880

<210> 76
 <211> 887
 <212> PRT
 <213> Homo sapiens

<400> 76
 Met Arg Ala Leu Glu Gly Pro Gly Leu Ser Leu Leu Cys Leu Val Leu
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 Ala Leu Pro Ala Leu Leu Pro Val Pro Ala Val Arg Gly Val Ala Glu
 20 25 30
 Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly Glu Arg Leu Val
 35 40 45
 Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg Pro Cys Arg Arg
 50 55 60
 Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg His Tyr Thr Gln
 65 70 75 80
 Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn Val Leu Cys Gly
 85 90 95
 Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr His Asn Arg Ala
 100 105 110
 Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly Phe Cys Leu Glu
 115 120 125
 His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala Pro Gly Thr Pro
 130 135 140
 Ser Gln Asn Thr Gln Cys Gln Pro Cys Pro Pro Gly Thr Phe Ser Ala
 145 150 155 160
 Ser Ser Ser Ser Ser Glu Gln Cys Gln Pro His Arg Asn Cys Thr Ala
 165 170 175
 Leu Gly Leu Ala Leu Asn Val Pro Gly Ser Ser Ser His Asp Thr Leu
 180 185 190

Cys	Thr	Ser	Cys	Thr	Gly	Phe	Pro	Leu	Ser	Thr	Arg	Val	Pro	Gly	Ala		
		195					200					205					
Glu	Glu	Cys	Glu	Arg	Ala	Val	Ile	Asp	Phe	Val	Ala	Phe	Gln	Asp	Ile		
	210					215					220						
Ser	Ile	Lys	Arg	Leu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu	Ala	Pro	Glu		
225					230					235					240		
Gly	Trp	Gly	Pro	Thr	Pro	Arg	Ala	Gly	Arg	Ala	Ala	Leu	Gln	Leu	Lys		
				245					250					255			
Leu	Arg	Arg	Arg	Leu	Thr	Glu	Leu	Leu	Gly	Ala	Gln	Asp	Gly	Ala	Leu		
			260					265					270				
Leu	Val	Arg	Leu	Leu	Gln	Ala	Leu	Arg	Val	Ala	Arg	Met	Pro	Gly	Leu		
		275					280					285					
Glu	Arg	Ser	Val	Arg	Glu	Arg	Phe	Leu	Pro	Val	His	Thr	Ser	Asp	Ala		
	290					295					300						
His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn		
305					310					315					320		
Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys		
				325					330					335			
Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala		
			340					345					350				
Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu		
		355					360					365					
His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu		
	370					375					380						
Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg		
385					390					395					400		
Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg		
				405					410					415			
Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn		
			420					425					430				
Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His		
		435					440					445					
Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys		
	450					455					460						
Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu		
465					470					475					480		
Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala		
				485					490					495			

Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala		
			500					505					510				
Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala		
		515					520					525					
Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His		
	530					535					540						
Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala		
545					550					555					560		
Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys		
				565					570					575			
Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile		
			580					585					590				
Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala		
		595					600					605					
Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala		
	610					615					620						
Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His		
625					630					635					640		
Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu		
				645					650					655			
Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr		
			660					665					670				
Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn		
		675					680					685					
Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys		
	690					695					700						
Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val		
705					710					715					720		
Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly		
				725					730				735				
Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu		
			740					745					750				
Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys		
		755					760					765					
Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val		
		770				775						780					
Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val		
785					790					795					800		

Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys
 805 810 815
 Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val
 820 825 830
 Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala
 835 840 845
 Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp
 850 855 860
 Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala
 865 870 875 880
 Ser Gln Ala Ala Leu Gly Leu
 885

<210> 77
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 <212> PRT
 <213> Homo sapiens

<400> 77
 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
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 Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30
 His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45
 Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60
 Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
 65 70 75 80
 Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
 85 90 95
 Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
 100 105 110
 Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
 115 120 125
 His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
 130 135 140
 Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
 145 150 155 160
 Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro

165										170					175				
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys				
			180					185					190						
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu				
		195					200					205							
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys				
	210					215					220								
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val				
225					230					235					240				
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser				
				245					250					255					
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly				
			260					265					270						
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile				
		275					280					285							
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu				
	290					295					300								
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp				
305					310					315					320				
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser				
				325					330					335					
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly				
			340					345					350						
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val				
		355					360					365							
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys				
		370				375					380								
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu				
385					390					395					400				
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys				
				405					410					415					
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu				
			420					425					430						
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val				
		435					440					445							
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His				
	450					455					460								
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val				

465		470		475		480
Leu Asn Gln	Leu Cys Val	Leu His Glu	Lys Thr Pro	Val Ser Asp	Arg	
	485		490		495	
Val Thr Lys	Cys Cys Thr	Glu Ser Leu	Val Asn Arg	Arg Pro Cys	Phe	
	500	505		510		
Ser Ala Leu	Glu Val Asp	Glu Thr Tyr	Val Pro Lys	Glu Phe Asn	Ala	
	515	520		525		
Glu Thr Phe	Thr Phe His	Ala Asp Ile	Cys Thr Leu	Ser Glu Lys	Glu	
		535		540		
Arg Gln Ile	Lys Lys Gln	Thr Ala Leu	Val Glu Leu	Val Lys His	Lys	
545		550		555		560
Pro Lys Ala	Thr Lys Glu	Gln Leu Lys	Ala Val Met	Asp Asp Phe	Ala	
	565		570		575	
Ala Phe Val	Glu Lys Cys	Cys Lys Ala	Asp Asp Lys	Glu Thr Cys	Phe	
	580		585		590	
Ala Glu Glu	Gly Lys Lys	Leu Val Ala	Ala Ser Gln	Ala Ala Leu	Gly	
	595	600		605		
Val Ala Glu	Thr Pro Thr	Tyr Pro Trp	Arg Asp Ala	Glu Thr Gly	Glu	
	610	615		620		
Arg Leu Val	Cys Ala Gln	Cys Pro Pro	Gly Thr Phe	Val Gln Arg	Pro	
625		630		635		640
Cys Arg Arg	Asp Ser Pro	Thr Thr Cys	Gly Pro Cys	Pro Pro Arg	His	
	645		650		655	
Tyr Thr Gln	Phe Trp Asn	Tyr Leu Glu	Arg Cys Arg	Tyr Cys Asn	Val	
	660	665		670		
Leu Cys Gly	Glu Arg Glu	Glu Glu Ala	Arg Ala Cys	His Ala Thr	His	
	675	680		685		
Asn Arg Ala	Cys Arg Cys	Arg Thr Gly	Phe Phe Ala	His Ala Gly	Phe	
	690	695		700		
Cys Leu Glu	His Ala Ser	Cys Pro Pro	Gly Ala Gly	Val Ile Ala	Pro	
705		710		715		720
Gly Thr Pro	Ser Gln Asn	Thr Gln Cys	Gln Pro Cys	Pro Pro Gly	Thr	
	725		730		735	
Phe Ser Ala	Ser Ser Ser	Ser Ser Glu	Gln Cys Gln	Pro His Arg	Asn	
	740		745		750	
Cys Thr Ala	Leu Gly Leu	Ala Leu Asn	Val Pro Gly	Ser Ser Ser	His	
	755	760		765		
Asp Thr Leu	Cys Thr Ser	Cys Thr Gly	Phe Pro Leu	Ser Thr Arg	Val	

770					775					780					
Pro	Gly	Ala	Glu	Glu	Cys	Glu	Arg	Ala	Val	Ile	Asp	Phe	Val	Ala	Phe
785					790					795					800
Gln	Asp	Ile	Ser	Ile	Lys	Arg	Leu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu
				805					810					815	
Ala	Pro	Glu	Gly	Trp	Gly	Pro	Thr	Pro	Arg	Ala	Gly	Arg	Ala	Ala	Leu
			820					825						830	
Gln	Leu	Lys	Leu	Arg	Arg	Arg	Leu	Thr	Glu	Leu	Leu	Gly	Ala	Gln	Asp
		835					840					845			
Gly	Ala	Leu	Leu	Val	Arg	Leu	Leu	Gln	Ala	Leu	Arg	Val	Ala	Arg	Met
	850					855					860				
Pro	Gly	Leu	Glu	Arg	Ser	Val	Arg	Glu	Arg	Phe	Leu	Pro	Val	His	
865						870					875				

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 <212> PRT
 <213> Homo sapiens

<400> 78															
Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Val	Ala	Glu	Thr	Pro	Thr	Tyr	Pro
			20					25					30		
Trp	Arg	Asp	Ala	Glu	Thr	Gly	Glu	Arg	Leu	Val	Cys	Ala	Gln	Cys	Pro
		35					40					45			
Pro	Gly	Thr	Phe	Val	Gln	Arg	Pro	Cys	Arg	Arg	Asp	Ser	Pro	Thr	Thr
	50					55					60				
Cys	Gly	Pro	Cys	Pro	Pro	Arg	His	Tyr	Thr	Gln	Phe	Trp	Asn	Tyr	Leu
	65				70						75				80
Glu	Arg	Cys	Arg	Tyr	Cys	Asn	Val	Leu	Cys	Gly	Glu	Arg	Glu	Glu	Glu
				85					90					95	
Ala	Arg	Ala	Cys	His	Ala	Thr	His	Asn	Arg	Ala	Cys	Arg	Cys	Arg	Thr
			100					105					110		
Gly	Phe	Phe	Ala	His	Ala	Gly	Phe	Cys	Leu	Glu	His	Ala	Ser	Cys	Pro
		115					120					125			
Pro	Gly	Ala	Gly	Val	Ile	Ala	Pro	Gly	Thr	Pro	Ser	Gln	Asn	Thr	Gln
	130					135					140				
Cys	Gln	Pro	Cys	Pro	Pro	Gly	Thr	Phe	Ser	Ala	Ser	Ser	Ser	Ser	Ser
145					150						155				160

Glu	Gln	Cys	Gln	Pro	His	Arg	Gln	Cys	Thr	Ala	Leu	Gly	Leu	Ala	Leu	
				165					170						175	
Asn	Val	Pro	Gly	Ser	Ser	Ser	His	Asp	Thr	Leu	Cys	Thr	Ser	Cys	Thr	
			180					185					190			
Gly	Phe	Pro	Leu	Ser	Thr	Arg	Val	Pro	Gly	Ala	Glu	Glu	Cys	Glu	Arg	
		195					200					205				
Ala	Val	Ile	Asp	Phe	Val	Ala	Phe	Gln	Asp	Ile	Ser	Ile	Lys	Arg	Leu	
	210					215					220					
Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu	Ala	Pro	Glu	Gly	Trp	Gly	Pro	Thr	
225					230					235					240	
Pro	Arg	Ala	Gly	Arg	Ala	Ala	Leu	Gln	Leu	Lys	Leu	Arg	Arg	Arg	Leu	
				245					250					255		
Thr	Glu	Leu	Leu	Gly	Ala	Gln	Asp	Gly	Ala	Leu	Leu	Val	Arg	Leu	Leu	
			260					265					270			
Gln	Ala	Leu	Arg	Val	Ala	Arg	Met	Pro	Gly	Leu	Glu	Arg	Ser	Val	Arg	
		275					280					285				
Glu	Arg	Phe	Leu	Pro	Val	His	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	
	290					295					300					
Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	
305					310					315					320	
Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	
				325					330					335		
Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	
			340					345					350			
Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	
		355					360					365				
Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	
	370					375					380					
Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	
385					390					395					400	
Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	
				405					410					415		
Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	
			420					425					430			
Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	
	435						440					445				
Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	
	450					455					460					

Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu
 465 470 475 480
 Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala
 485 490 495
 Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val Ala
 500 505 510
 Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys
 515 520 525
 Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp
 530 535 540
 Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys
 545 550 555 560
 Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys
 565 570 575
 Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu
 580 585 590
 Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys
 595 600 605
 Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met
 610 615 620
 Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu
 625 630 635 640
 Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys
 645 650 655
 Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe
 660 665 670
 Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu
 675 680 685
 Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val
 690 695 700
 Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu
 705 710 715 720
 Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro
 725 730 735
 Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu
 740 745 750
 Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val
 755 760 765

Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser
 770 775 780
 Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu
 785 790 795 800
 Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg
 805 810 815
 Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro
 820 825 830
 Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala
 835 840 845
 Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala
 850 855 860
 Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 865 870 875 880

<210> 79
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 <213> Homo sapiens

<400> 79
 Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Ser Leu Asp Lys Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30
 His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45
 Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60
 Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
 65 70 75 80
 Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
 85 90 95
 Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
 100 105 110
 Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
 115 120 125
 His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
 130 135 140
 Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
 145 150 155 160

Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
 165 170 175
 Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
 180 185 190
 Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu
 195 200 205
 Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys
 210 215 220
 Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val
 225 230 235 240
 Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser
 245 250 255
 Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly
 260 265 270
 Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile
 275 280 285
 Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu
 290 295 300
 Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp
 305 310 315 320
 Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser
 325 330 335
 Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly
 340 345 350
 Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val
 355 360 365
 Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 370 375 380
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 385 390 395 400
 Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
 405 410 415
 Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
 420 425 430
 Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
 435 440 445
 Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
 450 455 460

Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	
465					470					475					480	
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	
				485					490					495		
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	
			500					505					510			
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	
		515					520					525				
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	
	530					535					540					
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	
545					550					555					560	
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	
				565					570					575		
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	
			580					585					590			
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	
		595					600					605				
Leu	Val	Ala	Glu	Thr	Pro	Thr	Tyr	Pro	Trp	Arg	Asp	Ala	Glu	Thr	Gly	
	610					615					620					
Glu	Arg	Leu	Val	Cys	Ala	Gln	Cys	Pro	Pro	Gly	Thr	Phe	Val	Gln	Arg	
625					630					635					640	
Pro	Cys	Arg	Arg	Asp	Ser	Pro	Thr	Thr	Cys	Gly	Pro	Cys	Pro	Pro	Arg	
				645					650					655		
His	Tyr	Thr	Gln	Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	Tyr	Cys	Asn	
			660					665					670			
Val	Leu	Cys	Gly	Glu	Arg	Glu	Glu	Glu	Ala	Arg	Ala	Cys	His	Ala	Thr	
		675					680					685				
His	Asn	Arg	Ala	Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	His	Ala	Gly	
	690					695					700					
Phe	Cys	Leu	Glu	His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	Val	Ile	Ala	
705					710					715					720	
Pro	Gly	Thr	Pro	Ser	Gln	Asn	Thr	Gln	Cys	Gln	Pro	Cys	Pro	Pro	Gly	
				725					730					735		
Thr	Phe	Ser	Ala	Ser	Ser	Ser	Ser	Ser	Glu	Gln	Cys	Gln	Pro	His	Arg	
			740					745					750			
Gln	Cys	Thr	Ala	Leu	Gly	Leu	Ala	Leu	Asn	Val	Pro	Gly	Ser	Ser	Ser	
		755					760					765				

His Asp Thr Leu Cys Thr Ser Cys Thr Gly Phe Pro Leu Ser Thr Arg
 770 775 780
 Val Pro Gly Ala Glu Glu Cys Glu Arg Ala Val Ile Asp Phe Val Ala
 785 790 795 800
 Phe Gln Asp Ile Ser Ile Lys Arg Leu Gln Arg Leu Leu Gln Ala Leu
 805 810 815
 Glu Ala Pro Glu Gly Trp Gly Pro Thr Pro Arg Ala Gly Arg Ala Ala
 820 825 830
 Leu Gln Leu Lys Leu Arg Arg Arg Leu Thr Glu Leu Leu Gly Ala Gln
 835 840 845
 Asp Gly Ala Leu Leu Val Arg Leu Leu Gln Ala Leu Arg Val Ala Arg
 850 855 860
 Met Pro Gly Leu Glu Arg Ser Val Arg Glu Arg Phe Leu Pro Val His
 865 870 875 880

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 <212> PRT
 <213> Homo sapiens

<400> 80
 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30
 His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45
 Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60
 Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
 65 70 75 80
 Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
 85 90 95
 Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
 100 105 110
 Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
 115 120 125
 His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
 130 135 140

Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	145	150	155	160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	165	170	175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	180	185	190	
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	195	200	205	
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	210	215	220	
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	225	230	235	240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	245	250	255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	260	265	270	
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	275	280	285	
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	290	295	300	
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	305	310	315	320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	325	330	335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	340	345	350	
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	355	360	365	
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	370	375	380	
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	385	390	395	400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	405	410	415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	420	425	430	
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	435	440	445	

Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	450	455	460
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	465	470	475
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	485	490	495
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	500	505	510
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	515	520	525
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	530	535	540
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	545	550	555
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	565	570	575
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	580	585	590
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	595	600	605
Leu	Leu	Glu	Asp	Asp	Asp	Lys	Val	Ala	Glu	Thr	Pro	Thr	Tyr	Pro	Trp	610	615	620
Arg	Asp	Ala	Glu	Thr	Gly	Glu	Arg	Leu	Val	Cys	Ala	Gln	Cys	Pro	Pro	625	630	635
Gly	Thr	Phe	Val	Gln	Arg	Pro	Cys	Arg	Arg	Asp	Ser	Pro	Thr	Thr	Cys	645	650	655
Gly	Pro	Cys	Pro	Pro	Arg	His	Tyr	Thr	Gln	Phe	Trp	Asn	Tyr	Leu	Glu	660	665	670
Arg	Cys	Arg	Tyr	Cys	Asn	Val	Leu	Cys	Gly	Glu	Arg	Glu	Glu	Glu	Ala	675	680	685
Arg	Ala	Cys	His	Ala	Thr	His	Asn	Arg	Ala	Cys	Arg	Cys	Arg	Thr	Gly	690	695	700
Phe	Phe	Ala	His	Ala	Gly	Phe	Cys	Leu	Glu	His	Ala	Ser	Cys	Pro	Pro	705	710	715
Gly	Ala	Gly	Val	Ile	Ala	Pro	Gly	Thr	Pro	Ser	Gln	Asn	Thr	Gln	Cys	725	730	735
Gln	Pro	Cys	Pro	Pro	Gly	Thr	Phe	Ser	Ala	Ser	Ser	Ser	Ser	Ser	Glu	740	745	750

Gln Cys Gln Pro His Arg Asn Cys Thr Ala Leu Gly Leu Ala Leu Asn
 755 760 765
 Val Pro Gly Ser Ser Ser His Asp Thr Leu Cys Thr Ser Cys Thr Gly
 770 775 780
 Phe Pro Leu Ser Thr Arg Val Pro Gly Ala Glu Glu Cys Glu Arg Ala
 785 790 795 800
 Val Ile Asp Phe Val Ala Phe Gln Asp Ile Ser Ile Lys Arg Leu Gln
 805 810 815
 Arg Leu Leu Gln Ala Leu Glu Ala Pro Glu Gly Trp Gly Pro Thr Pro
 820 825 830
 Arg Ala Gly Arg Ala Ala Leu Gln Leu Lys Leu Arg Arg Arg Leu Thr
 835 840 845
 Glu Leu Leu Gly Ala Gln Asp Gly Ala Leu Leu Val Arg Leu Leu Gln
 850 855 860
 Ala Leu Arg Val Ala Arg Met Pro Gly Leu
 865 870

<210> 81
 <211> 870
 <212> PRT
 <213> Homo sapiens

<400> 81

Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30
 His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45
 Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60
 Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
 65 70 75 80
 Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
 85 90 95
 Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
 100 105 110
 Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
 115 120 125
 His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val

130					135					140					
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
145					150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
225					230					235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245					250					255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly
			260					265					270		
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile
			275				280					285			
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu
	290					295					300				
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp
305					310					315					320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser
				325					330					335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly
			340					345					350		
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val
		355					360					365			
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys
	370					375					380				
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu
385					390					395					400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys
				405					410					415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu
			420					425					430		
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val

435					440					445					
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His
	450					455					460				
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val
465					470					475					480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg
				485					490					495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe
			500					505					510		
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala
		515					520					525			
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu
	530					535					540				
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys
545					550					555					560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala
				565					570					575	
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe
			580					585					590		
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly
		595					600					605			
Leu	Leu	Glu	Asp	Asp	Asp	Lys	Val	Ala	Glu	Thr	Pro	Thr	Tyr	Pro	Trp
	610					615					620				
Arg	Asp	Ala	Glu	Thr	Gly	Glu	Arg	Leu	Val	Cys	Ala	Gln	Cys	Pro	Pro
625					630					635					640
Gly	Thr	Phe	Val	Gln	Arg	Pro	Cys	Arg	Arg	Asp	Ser	Pro	Thr	Thr	Cys
				645					650					655	
Gly	Pro	Cys	Pro	Pro	Arg	His	Tyr	Thr	Gln	Phe	Trp	Asn	Tyr	Leu	Glu
			660					665					670		
Arg	Cys	Arg	Tyr	Cys	Asn	Val	Leu	Cys	Gly	Glu	Arg	Glu	Glu	Glu	Ala
		675					680					685			
Arg	Ala	Cys	His	Ala	Thr	His	Asn	Arg	Ala	Cys	Arg	Cys	Arg	Thr	Gly
	690					695					700				
Phe	Phe	Ala	His	Ala	Gly	Phe	Cys	Leu	Glu	His	Ala	Ser	Cys	Pro	Pro
705					710					715					720
Gly	Ala	Gly	Val	Ile	Ala	Pro	Gly	Thr	Pro	Ser	Gln	Asn	Thr	Gln	Cys
				725					730					735	
Gln	Pro	Cys	Pro	Pro	Gly	Thr	Phe	Ser	Ala	Ser	Ser	Ser	Ser	Ser	Glu

740					745					750					
Gln	Cys	Gln	Pro	His	Arg	Asn	Cys	Thr	Ala	Leu	Gly	Leu	Ala	Leu	Asn
		755					760					765			
Val	Pro	Gly	Ser	Ser	Ser	His	Asp	Thr	Leu	Cys	Thr	Ser	Cys	Thr	Gly
	770					775					780				
Phe	Pro	Leu	Ser	Thr	Arg	Val	Pro	Gly	Ala	Glu	Glu	Cys	Glu	Arg	Ala
785					790					795					800
Val	Ile	Asp	Phe	Val	Ala	Phe	Gln	Asp	Ile	Ser	Ile	Lys	Arg	Leu	Gln
				805					810					815	
Arg	Leu	Leu	Gln	Ala	Leu	Glu	Ala	Pro	Glu	Gly	Trp	Gly	Pro	Thr	Pro
			820					825					830		
Arg	Ala	Gly	Arg	Ala	Ala	Leu	Gln	Leu	Lys	Leu	Arg	Arg	Arg	Leu	Thr
		835					840					845			
Glu	Leu	Leu	Gly	Ala	Gln	Asp	Gly	Ala	Leu	Leu	Val	Arg	Leu	Leu	Gln
	850					855					860				
Ala	Leu	Arg	Val	Ala	Arg										
865					870										

<210> 82

<211> 876

<212> PRT

<213> Homo sapiens

<400> 82

Met	Lys	Trp	Val	Thr	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Gly	Val	Phe	Arg	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
65					70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			

62

Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val
		435						440					445		
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His
	450					455					460				
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val
465					470					475					480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg
				485					490					495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe
			500					505					510		
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala
		515					520					525			
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu
	530					535					540				
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys
545					550					555					560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala
				565					570					575	
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe
		580						585					590		
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly
		595					600					605			
Leu	Leu	Glu	Val	Ala	Glu	Thr	Pro	Thr	Tyr	Pro	Trp	Arg	Asp	Ala	Glu
	610					615					620				
Thr	Gly	Glu	Arg	Leu	Val	Cys	Ala	Gln	Cys	Pro	Pro	Gly	Thr	Phe	Val
625					630					635					640
Gln	Arg	Pro	Cys	Arg	Arg	Asp	Ser	Pro	Thr	Thr	Cys	Gly	Pro	Cys	Pro
				645					650					655	
Pro	Arg	His	Tyr	Thr	Gln	Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	Tyr
		660						665					670		
Cys	Asn	Val	Leu	Cys	Gly	Glu	Arg	Glu	Glu	Glu	Ala	Arg	Ala	Cys	His
		675					680					685			
Ala	Thr	His	Asn	Arg	Ala	Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	His
	690					695					700				
Ala	Gly	Phe	Cys	Leu	Glu	His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	Val
705					710					715					720
Ile	Ala	Pro	Gly	Thr	Pro	Ser	Gln	Asn	Thr	Gln	Cys	Gln	Pro	Cys	Pro
				725					730					735	

Pro Gly Thr Phe Ser Ala Ser Ser Ser Ser Ser Glu Gln Cys Gln Pro
 740 745 750
 His Arg Asn Cys Thr Ala Leu Gly Leu Ala Leu Asn Val Pro Gly Ser
 755 760 765
 Ser Ser His Asp Thr Leu Cys Thr Ser Cys Thr Gly Phe Pro Leu Ser
 770 775 780
 Thr Arg Val Pro Gly Ala Glu Glu Cys Glu Arg Ala Val Ile Asp Phe
 785 790 795 800
 Val Ala Phe Gln Asp Ile Ser Ile Lys Arg Leu Gln Arg Leu Leu Gln
 805 810 815
 Ala Leu Glu Ala Pro Glu Gly Trp Gly Pro Thr Pro Arg Ala Gly Arg
 820 825 830
 Ala Ala Leu Gln Leu Lys Leu Arg Arg Arg Leu Thr Glu Leu Leu Gly
 835 840 845
 Ala Gln Asp Gly Ala Leu Leu Val Arg Leu Leu Gln Ala Leu Arg Val
 850 855 860
 Ala Arg Met Pro Gly Leu Glu Arg Ser Val Arg Glu
 865 870 875

<210> 83
 <211> 844
 <212> PRT
 <213> Homo sapiens

<400> 83
 Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Ser Leu Asp Lys Arg Leu Pro Ala Gln Val Ala Phe Thr
 20 25 30
 Pro Tyr Ala Pro Glu Pro Gly Ser Thr Cys Arg Leu Arg Glu Tyr Tyr
 35 40 45
 Asp Gln Thr Ala Gln Met Cys Cys Ser Lys Cys Ser Pro Gly Gln His
 50 55 60
 Ala Lys Val Phe Cys Thr Lys Thr Ser Asp Thr Val Cys Asp Ser Cys
 65 70 75 80
 Glu Asp Ser Thr Tyr Thr Gln Leu Trp Asn Trp Val Pro Glu Cys Leu
 85 90 95
 Ser Cys Gly Ser Arg Cys Ser Ser Asp Gln Val Glu Thr Gln Ala Cys
 100 105 110

Thr	Arg	Glu	Gln	Asn	Arg	Ile	Cys	Thr	Cys	Arg	Pro	Gly	Trp	Tyr	Cys	
		115					120					125				
Ala	Leu	Ser	Lys	Gln	Glu	Gly	Cys	Arg	Leu	Cys	Ala	Pro	Leu	Arg	Lys	
	130					135					140					
Cys	Arg	Pro	Gly	Phe	Gly	Val	Ala	Arg	Pro	Gly	Thr	Glu	Thr	Ser	Asp	
145					150					155					160	
Val	Val	Cys	Lys	Pro	Cys	Ala	Pro	Gly	Thr	Phe	Ser	Asn	Thr	Thr	Ser	
				165					170						175	
Ser	Thr	Asp	Ile	Cys	Arg	Pro	His	Gln	Ile	Cys	Asn	Val	Val	Ala	Ile	
			180					185					190			
Pro	Gly	Asn	Ala	Ser	Met	Asp	Ala	Val	Cys	Thr	Ser	Thr	Ser	Pro	Thr	
		195					200					205				
Arg	Ser	Met	Ala	Pro	Gly	Ala	Val	His	Leu	Pro	Gln	Pro	Val	Ser	Thr	
	210					215					220					
Arg	Ser	Gln	His	Thr	Gln	Pro	Thr	Pro	Glu	Pro	Ser	Thr	Ala	Pro	Ser	
225					230				235						240	
Thr	Ser	Phe	Leu	Leu	Pro	Met	Gly	Pro	Ser	Pro	Pro	Ala	Glu	Gly	Ser	
				245					250					255		
Thr	Gly	Asp	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	
			260					265					270			
Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	
	275						280					285				
Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	
	290					295					300					
Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	
305					310					315					320	
Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	
				325					330					335		
Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	
			340					345					350			
Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	
		355					360					365				
Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	
	370					375					380					
Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	
385					390					395					400	
Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	
				405					410					415		

Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	420	425	430
Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	435	440	445
Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	450	455	460
Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	465	470	475
Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	485	490	495
Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	500	505	510
Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	515	520	525
Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	530	535	540
Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	545	550	555
Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	565	570	575
Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	580	585	590
Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	595	600	605
Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	610	615	620
Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	625	630	635
Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	645	650	655
Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	660	665	670
Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	675	680	685
Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	690	695	700
Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	705	710	715

Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys
 725 730 735
 Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val
 740 745 750
 Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe
 755 760 765
 His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys
 770 775 780
 Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys
 785 790 795 800
 Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys
 805 810 815
 Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys
 820 825 830
 Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 835 840

<210> 84
 <211> 775
 <212> PRT
 <213> Homo sapiens

<400> 84
 Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Ser Leu Asp Lys Arg Met Ser Tyr Asn Leu Leu Gly Phe
 20 25 30
 Leu Gln Arg Ser Ser Asn Phe Gln Cys Gln Lys Leu Leu Trp Gln Leu
 35 40 45
 Asn Gly Arg Leu Glu Tyr Cys Leu Lys Asp Arg Met Asn Phe Asp Ile
 50 55 60
 Pro Glu Glu Ile Lys Gln Leu Gln Gln Phe Gln Lys Glu Asp Ala Ala
 65 70 75 80
 Leu Thr Ile Tyr Glu Met Leu Gln Asn Ile Phe Ala Ile Phe Arg Gln
 85 90 95
 Asp Ser Ser Ser Thr Gly Trp Asn Glu Thr Ile Val Glu Asn Leu Leu
 100 105 110
 Ala Asn Val Tyr His Gln Ile Asn His Leu Lys Thr Val Leu Glu Glu
 115 120 125
 Lys Leu Glu Lys Glu Asp Phe Thr Arg Gly Lys Leu Met Ser Ser Leu

130					135					140					
His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg	Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys
145					150					155					160
Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr	Ile	Val	Arg	Val	Glu	Ile	Leu	Arg
				165					170					175	
Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu	Thr	Gly	Tyr	Leu	Arg	Asn	Asp	Ala
			180					185					190		
His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn
		195					200					205			
Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys
	210					215					220				
Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala
225					230					235					240
Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu
				245					250					255	
His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu
			260					265						270	
Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg
		275					280					285			
Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg
	290					295				300					
Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn
305					310					315					320
Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His
				325					330					335	
Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys
			340					345					350		
Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu
		355					360					365			
Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala
	370					375					380				
Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala
385					390					395					400
Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala
				405					410				415		
Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His
			420					425					430		
Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala

435					440					445					
Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys
450						455				460					
Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile
465					470					475					480
Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala
				485					490					495	
Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala
			500					505					510		
Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His
	515					520						525			
Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu
	530					535					540				
Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr
545					550					555					560
Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn
				565					570					575	
Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys
			580					585					590		
Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val
	595						600					605			
Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly
	610					615					620				
Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu
625					630					635					640
Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys
				645					650					655	
Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val
			660					665					670		
Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val
	675						680					685			
Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys
	690					695					700				
Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val
705					710					715					720
Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala
				725					730					735	
Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp

	740		745		750										
Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala
		755					760					765			
Ser	Gln	Ala	Ala	Leu	Gly	Leu									
	770					775									

<210> 85
 <211> 775
 <212> PRT
 <213> Homo sapiens

<400> 85															
Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
	65				70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
	145				150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				

Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
225					230					235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245					250					255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly
			260					265					270		
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile
		275					280					285			
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu
	290					295					300				
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp
305					310					315					320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser
				325					330					335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly
			340					345					350		
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val
		355					360					365			
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys
	370					375					380				
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu
385					390					395					400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys
				405					410					415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu
			420					425					430		
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val
		435					440					445			
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His
	450					455					460				
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val
465					470					475					480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg
				485					490					495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe
			500					505					510		
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala
		515					520					525			

Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe
 610 615 620
 Gln Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys
 625 630 635 640
 Leu Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu
 645 650 655
 Gln Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu
 660 665 670
 Gln Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp
 675 680 685
 Asn Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile
 690 695 700
 Asn His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe
 705 710 715 720
 Thr Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly
 725 730 735
 Arg Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp
 740 745 750
 Thr Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg
 755 760 765
 Leu Thr Gly Tyr Leu Arg Asn
 770 775

<210> 86

<211> 844

<212> PRT

<213> Homo sapiens

<400> 86

Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala

1	5	10	15
Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala	20	25	30
His Arg Phe Lys Asp Leu Gly Glu Asn Phe Lys Ala Leu Val Leu	35	40	45
Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val	50	55	60
Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp	65	70	75
Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp	85	90	95
Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala	100	105	110
Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln	115	120	125
His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val	130	135	140
Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys	145	150	155
Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro	165	170	175
Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys	180	185	190
Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu	195	200	205
Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys	210	215	220
Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val	225	230	235
Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser	245	250	255
Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly	260	265	270
Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile	275	280	285
Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu	290	295	300
Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp			

305					310					315					320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser
				325					330					335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly
			340					345					350		
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val
		355					360					365			
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys
		370				375						380			
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu
385					390					395					400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys
				405					410					415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu
			420					425					430		
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val
		435					440					445			
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His
		450				455					460				
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val
465					470					475					480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg
				485					490					495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe
			500					505					510		
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala
		515					520					525			
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu
		530				535					540				
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys
545					550					555					560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala
				565					570					575	
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe
			580					585					590		
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly
		595					600					605			
Leu	Leu	Pro	Ala	Gln	Val	Ala	Phe	Thr	Pro	Tyr	Ala	Pro	Glu	Pro	Gly

610		615		620
Ser Thr Cys Arg Leu Arg Glu Tyr Tyr Asp Gln Thr Ala Gln Met Cys				
625		630		635
Cys Ser Lys Cys Ser Pro Gly Gln His Ala Lys Val Phe Cys Thr Lys				
	645		650	655
Thr Ser Asp Thr Val Cys Asp Ser Cys Glu Asp Ser Thr Tyr Thr Gln				
	660		665	670
Leu Trp Asn Trp Val Pro Glu Cys Leu Ser Cys Gly Ser Arg Cys Ser				
	675		680	685
Ser Asp Gln Val Glu Thr Gln Ala Cys Thr Arg Glu Gln Asn Arg Ile				
	690		695	700
Cys Thr Cys Arg Pro Gly Trp Tyr Cys Ala Leu Ser Lys Gln Glu Gly				
705		710		715
Cys Arg Leu Cys Ala Pro Leu Arg Lys Cys Arg Pro Gly Phe Gly Val				
	725		730	735
Ala Arg Pro Gly Thr Glu Thr Ser Asp Val Val Cys Lys Pro Cys Ala				
	740		745	750
Pro Gly Thr Phe Ser Asn Thr Thr Ser Ser Thr Asp Ile Cys Arg Pro				
	755		760	765
His Gln Ile Cys Asn Val Val Ala Ile Pro Gly Asn Ala Ser Met Asp				
	770		775	780
Ala Val Cys Thr Ser Thr Ser Pro Thr Arg Ser Met Ala Pro Gly Ala				
785		790		795
Val His Leu Pro Gln Pro Val Ser Thr Arg Ser Gln His Thr Gln Pro				
	805		810	815
Thr Pro Glu Pro Ser Thr Ala Pro Ser Thr Ser Phe Leu Leu Pro Met				
	820		825	830
Gly Pro Ser Pro Pro Ala Glu Gly Ser Thr Gly Asp				
	835		840	

<210> 87

<211> 880

<212> PRT

<213> Homo sapiens

<400> 87

Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15

Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
20 25 30

Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly
 340 345 350
 Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val
 355 360 365
 Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 370 375 380
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 385 390 395 400
 Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
 405 410 415
 Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
 420 425 430
 Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
 435 440 445
 Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
 450 455 460
 Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
 465 470 475 480
 Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
 485 490 495
 Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
 500 505 510
 Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Val Ala Glu Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly
 610 615 620
 Glu Arg Leu Val Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg
 625 630 635 640

Pro Cys Arg Arg Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg
 645 650 655
 His Tyr Thr Gln Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn
 660 665 670
 Val Leu Cys Gly Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr
 675 680 685
 His Asn Arg Ala Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly
 690 695 700
 Phe Cys Leu Glu His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala
 705 710 715 720
 Pro Gly Thr Pro Ser Gln Asn Thr Gln Cys Gln Pro Cys Pro Pro Gly
 725 730 735
 Thr Phe Ser Ala Ser Ser Ser Ser Ser Glu Gln Cys Gln Pro His Arg
 740 745 750
 Asn Cys Thr Ala Leu Gly Leu Ala Leu Asn Val Pro Gly Ser Ser Ser
 755 760 765
 His Asp Thr Leu Cys Thr Ser Cys Thr Gly Phe Pro Leu Ser Thr Arg
 770 775 780
 Val Pro Gly Ala Glu Glu Cys Glu Arg Ala Val Ile Asp Phe Val Ala
 785 790 795 800
 Phe Gln Asp Ile Ser Ile Lys Arg Leu Gln Arg Leu Leu Gln Ala Leu
 805 810 815
 Glu Ala Pro Glu Gly Trp Gly Pro Thr Pro Arg Ala Gly Arg Ala Ala
 820 825 830
 Leu Gln Leu Lys Leu Arg Arg Arg Leu Thr Glu Leu Leu Gly Ala Gln
 835 840 845
 Asp Gly Ala Leu Leu Val Arg Leu Leu Gln Ala Leu Arg Val Ala Arg
 850 855 860
 Met Pro Gly Leu Glu Arg Ser Val Arg Glu Arg Phe Leu Pro Val His
 865 870 875 880

<210> 88
 <211> 885
 <212> PRT
 <213> Homo sapiens

<400> 88
 Met Arg Ala Leu Glu Gly Pro Gly Leu Ser Leu Leu Cys Leu Val Leu
 1 5 10 15

Ala Leu Pro Ala Leu Leu Pro Val Pro Ala Val Arg Gly Val Ala Glu

20					25					30					
Thr	Pro	Thr	Tyr	Pro	Trp	Arg	Asp	Ala	Glu	Thr	Gly	Glu	Arg	Leu	Val
		35					40					45			
Cys	Ala	Gln	Cys	Pro	Pro	Gly	Thr	Phe	Val	Gln	Arg	Pro	Cys	Arg	Arg
	50					55					60				
Asp	Ser	Pro	Thr	Thr	Cys	Gly	Pro	Cys	Pro	Pro	Arg	His	Tyr	Thr	Gln
65						70					75				80
Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	Tyr	Cys	Asn	Val	Leu	Cys	Gly
				85					90					95	
Glu	Arg	Glu	Glu	Glu	Ala	Arg	Ala	Cys	His	Ala	Thr	His	Asn	Arg	Ala
			100					105					110		
Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	His	Ala	Gly	Phe	Cys	Leu	Glu
		115					120					125			
His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	Val	Ile	Ala	Pro	Gly	Thr	Pro
	130					135					140				
Ser	Gln	Asn	Thr	Gln	Cys	Gln	Pro	Cys	Pro	Pro	Gly	Thr	Phe	Ser	Ala
145						150					155				160
Ser	Ser	Ser	Ser	Ser	Glu	Gln	Cys	Gln	Pro	His	Arg	Asn	Cys	Thr	Ala
				165					170					175	
Leu	Gly	Leu	Ala	Leu	Asn	Val	Pro	Gly	Ser	Ser	Ser	His	Asp	Thr	Leu
			180					185					190		
Cys	Thr	Ser	Cys	Thr	Gly	Phe	Pro	Leu	Ser	Thr	Arg	Val	Pro	Gly	Ala
		195					200					205			
Glu	Glu	Cys	Glu	Arg	Ala	Val	Ile	Asp	Phe	Val	Ala	Phe	Gln	Asp	Ile
	210					215					220				
Ser	Ile	Lys	Arg	Leu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu	Ala	Pro	Glu
225						230					235				240
Gly	Trp	Gly	Pro	Thr	Pro	Arg	Ala	Gly	Arg	Ala	Ala	Leu	Gln	Leu	Lys
				245					250					255	
Leu	Arg	Arg	Arg	Leu	Thr	Glu	Leu	Leu	Gly	Ala	Gln	Asp	Gly	Ala	Leu
			260					265					270		
Leu	Val	Arg	Leu	Leu	Gln	Ala	Leu	Arg	Val	Ala	Arg	Met	Pro	Gly	Leu
		275					280					285			
Glu	Arg	Ser	Val	Arg	Glu	Arg	Phe	Leu	Pro	Val	His	Asp	Ala	His	Lys
	290					295					300				
Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys
305						310					315				320
Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe

325					330					335					
Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr
			340					345					350		
Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr
		355					360					365			
Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr
	370					375					380				
Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu
385						390					395				400
Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val
				405					410					415	
Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu
			420					425					430		
Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr
		435					440					445			
Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala
	450					455					460				
Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro
465						470					475				480
Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln
				485					490					495	
Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys
			500					505					510		
Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe
		515					520					525			
Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu
	530					535					540				
Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu
545						550					555				560
Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys
				565					570					575	
Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu
			580					585					590		
Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp
		595					600					605			
Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp
	610					615					620				
Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp

625					630						635				640
Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr
				645					650					655	
Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys
			660					665					670		
Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile
		675					680					685			
Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln
	690					695					700				
Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr
705					710					715					720
Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys
				725					730					735	
Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr
			740					745					750		
Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro
		755					760					765			
Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg
		770				775					780				
Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys
785					790					795					800
Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu
				805					810					815	
Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu
			820					825					830		
Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met
		835					840					845			
Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys
	850					855					860				
Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln
865					870					875					880
Ala	Ala	Leu	Gly	Leu											
				885											

<210> 89
 <211> 885
 <212> PRT
 <213> Homo sapiens

<400> 89

Met	Arg	Ala	Leu	Glu	Gly	Pro	Gly	Leu	Ser	Leu	Leu	Cys	Leu	Val	Leu	1	5	10	15
Ala	Leu	Pro	Ala	Leu	Leu	Pro	Val	Pro	Ala	Val	Arg	Gly	Val	Ala	Glu	20	25	30	
Thr	Pro	Thr	Tyr	Pro	Trp	Arg	Asp	Ala	Glu	Thr	Gly	Glu	Arg	Leu	Val	35	40	45	
Cys	Ala	Gln	Cys	Pro	Pro	Gly	Thr	Phe	Val	Gln	Arg	Pro	Cys	Arg	Arg	50	55	60	
Asp	Ser	Pro	Thr	Thr	Cys	Gly	Pro	Cys	Pro	Pro	Arg	His	Tyr	Thr	Gln	65	70	75	80
Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	Tyr	Cys	Asn	Val	Leu	Cys	Gly	85	90	95	
Glu	Arg	Glu	Glu	Glu	Ala	Arg	Ala	Cys	His	Ala	Thr	His	Asn	Arg	Ala	100	105	110	
Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	His	Ala	Gly	Phe	Cys	Leu	Glu	115	120	125	
His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	Val	Ile	Ala	Pro	Gly	Thr	Pro	130	135	140	
Ser	Gln	Asn	Thr	Gln	Cys	Gln	Pro	Cys	Pro	Pro	Gly	Thr	Phe	Ser	Ala	145	150	155	160
Ser	Ser	Ser	Ser	Ser	Glu	Gln	Cys	Gln	Pro	His	Arg	Asn	Cys	Thr	Ala	165	170	175	
Leu	Gly	Leu	Ala	Leu	Asn	Val	Pro	Gly	Ser	Ser	Ser	His	Asp	Thr	Leu	180	185	190	
Cys	Thr	Ser	Cys	Thr	Gly	Phe	Pro	Leu	Ser	Thr	Arg	Val	Pro	Gly	Ala	195	200	205	
Glu	Glu	Cys	Glu	Arg	Ala	Val	Ile	Asp	Phe	Val	Ala	Phe	Gln	Asp	Ile	210	215	220	
Ser	Ile	Lys	Arg	Leu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu	Ala	Pro	Glu	225	230	235	240
Gly	Trp	Gly	Pro	Thr	Pro	Arg	Ala	Gly	Arg	Ala	Ala	Leu	Gln	Leu	Lys	245	250	255	
Leu	Arg	Arg	Arg	Leu	Thr	Glu	Leu	Leu	Gly	Ala	Gln	Asp	Gly	Ala	Leu	260	265	270	
Leu	Val	Arg	Leu	Leu	Gln	Ala	Leu	Arg	Val	Ala	Arg	Met	Pro	Gly	Leu	275	280	285	
Glu	Arg	Ser	Val	Arg	Glu	Arg	Phe	Leu	Pro	Val	His	Asp	Ala	His	Lys	290	295	300	

Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys
 305 310 315 320
 Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe
 325 330 335
 Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr
 340 345 350
 Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr
 355 360 365
 Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr
 370 375 380
 Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu
 385 390 395 400
 Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val
 405 410 415
 Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu
 420 425 430
 Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr
 435 440 445
 Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala
 450 455 460
 Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro
 465 470 475 480
 Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln
 485 490 495
 Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys
 500 505 510
 Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe
 515 520 525
 Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu
 530 535 540
 Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu
 545 550 555 560
 Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys
 565 570 575
 Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu
 580 585 590
 Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp
 595 600 605

Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp
610 615 620
Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp
625 630 635 640
Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr
645 650 655
Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys
660 665 670
Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile
675 680 685
Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln
690 695 700
Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr
705 710 715 720
Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys
725 730 735
Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr
740 745 750
Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro
755 760 765
Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg
770 775 780
Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys
785 790 795 800
Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu
805 810 815
Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu
820 825 830
Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met
835 840 845
Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys
850 855 860
Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln
865 870 875 880
Ala Ala Leu Gly Leu
885

<210> 90

<211> 880
 <212> PRT
 <213> Homo sapiens

<400> 90

Met	Lys	Trp	Val	Thr	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Gly	Val	Phe	Arg	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
	65				70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
	145				150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
	225					230				235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245					250					255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly
			260					265					270		
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile

275					280					285					
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu
290						295					300				
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp
305					310					315					320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser
				325					330					335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly
			340					345					350		
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val
		355					360					365			
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys
		370				375					380				
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu
385					390					395					400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys
				405					410					415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu
			420				425						430		
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val
		435					440					445			
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His
		450				455					460				
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val
465					470					475					480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg
				485					490					495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe
			500					505					510		
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala
		515					520					525			
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu
					535						540				
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys
545					550					555					560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala
				565					570					575	
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe

580					585					590					
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly
	595						600					605			
Leu	Val	Ala	Glu	Thr	Pro	Thr	Tyr	Pro	Trp	Arg	Asp	Ala	Glu	Thr	Gly
	610					615					620				
Glu	Arg	Leu	Val	Cys	Ala	Gln	Cys	Pro	Pro	Gly	Thr	Phe	Val	Gln	Arg
625					630					635					640
Pro	Cys	Arg	Arg	Asp	Ser	Pro	Thr	Thr	Cys	Gly	Pro	Cys	Pro	Pro	Arg
				645					650					655	
His	Tyr	Thr	Gln	Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	Tyr	Cys	Asn
			660					665					670		
Val	Leu	Cys	Gly	Glu	Arg	Glu	Glu	Glu	Ala	Arg	Ala	Cys	His	Ala	Thr
		675					680					685			
His	Asn	Arg	Ala	Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	His	Ala	Gly
	690					695					700				
Phe	Cys	Leu	Glu	His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	Val	Ile	Ala
705					710					715					720
Pro	Gly	Thr	Pro	Ser	Gln	Asn	Thr	Gln	Cys	Gln	Pro	Cys	Pro	Pro	Gly
				725					730					735	
Thr	Phe	Ser	Ala	Ser	Ser	Ser	Ser	Ser	Glu	Gln	Cys	Gln	Pro	His	Arg
			740					745					750		
Asn	Cys	Thr	Ala	Leu	Gly	Leu	Ala	Leu	Asn	Val	Pro	Gly	Ser	Ser	Ser
		755					760					765			
His	Asp	Thr	Leu	Cys	Thr	Ser	Cys	Thr	Gly	Phe	Pro	Leu	Ser	Thr	Arg
	770					775					780				
Val	Pro	Gly	Ala	Glu	Glu	Cys	Glu	Arg	Ala	Val	Ile	Asp	Phe	Val	Ala
785					790					795					800
Phe	Gln	Asp	Ile	Ser	Ile	Lys	Arg	Leu	Gln	Arg	Leu	Leu	Gln	Ala	Leu
				805					810					815	
Glu	Ala	Pro	Glu	Gly	Trp	Gly	Pro	Thr	Pro	Arg	Ala	Gly	Arg	Ala	Ala
			820					825					830		
Leu	Gln	Leu	Lys	Leu	Arg	Arg	Arg	Leu	Thr	Glu	Leu	Leu	Gly	Ala	Gln
		835					840					845			
Asp	Gly	Ala	Leu	Leu	Val	Arg	Leu	Leu	Gln	Ala	Leu	Arg	Val	Ala	Arg
	850					855					860				
Met	Pro	Gly	Leu	Glu	Arg	Ser	Val	Arg	Glu	Arg	Phe	Leu	Pro	Val	His
865					870					875					880

<210> 91
 <211> 635
 <212> PRT
 <213> Homo sapiens

<400> 91

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Gly	Asp	Arg	Leu	His	Cys	Lys	Pro
			20					25					30		
Gln	Arg	Gln	Ser	Pro	Trp	Met	Lys	Cys	Gln	His	Leu	Asp	Pro	Glu	Gly
		35					40					45			
Gly	Gly	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu
	50					55					60				
Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr
	65				70					75					80
Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val
				85					90					95	
Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys
			100					105					110		
Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala
		115					120					125			
Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln
	130					135					140				
Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro
145					150					155					160
Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala
				165					170					175	
Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile
			180					185					190		
Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala
		195					200					205			
Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys
	210					215					220				
Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys
225					230					235					240
Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe
				245					250					255	
Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg
			260					265						270	

Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu
275 280 285
Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala
290 295 300
Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser
305 310 315 320
Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys
325 330 335
Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu
340 345 350
Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn
355 360 365
Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr
370 375 380
Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala
385 390 395 400
Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro
405 410 415
His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu
420 425 430
Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu
435 440 445
Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys
450 455 460
Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu
465 470 475 480
Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met
485 490 495
Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val
500 505 510
Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr
515 520 525
Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp
530 535 540
Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His
545 550 555 560
Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln
565 570 575

Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu
580 585 590

Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys
595 600 605

Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys
610 615 620

Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
625 630 635

<210> 92
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<212> PRT
<213> Homo sapiens

<400> 92
Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15

Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
20 25 30

His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
35 40 45

Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
50 55 60

Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
65 70 75 80

Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
85 90 95

Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
100 105 110

Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
115 120 125

His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
130 135 140

Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
145 150 155 160

Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
165 170 175

Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
180 185 190

Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu
195 200 205

Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	210	215	220
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	225	230	235
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	245	250	255
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	260	265	270
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	275	280	285
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	290	295	300
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	305	310	315
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	325	330	335
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	340	345	350
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	355	360	365
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	370	375	380
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	385	390	395
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	405	410	415
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	420	425	430
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	435	440	445
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	450	455	460
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	465	470	475
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	485	490	495
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	500	505	510

Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Gly Asp Arg Leu His Cys Lys Pro Gln Arg Gln Ser Pro Trp Met
 610 615 620
 Lys Cys Gln His Leu Asp Pro Glu Gly Gly Gly
 625 630 635

<210> 93
 <211> 635
 <212> PRT
 <213> Homo sapiens

<400> 93
 Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Ser Leu Asp Lys Arg Gly Asp Asp Asp Asp Cys Gly Trp
 20 25 30
 Ile Gly Phe Ala Asn Phe His Leu Cys Leu His Gly Asp Pro Glu Gly
 35 40 45
 Gly Gly Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu
 50 55 60
 Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr
 65 70 75 80
 Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val
 85 90 95
 Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys
 100 105 110
 Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala
 115 120 125

Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	130	135	140
Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	145	150	155
Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	165	170	175
Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	180	185	190
Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	195	200	205
Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	210	215	220
Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	225	230	235
Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	245	250	255
Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	260	265	270
Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	275	280	285
Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	290	295	300
Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	305	310	315
Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	325	330	335
Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	340	345	350
Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	355	360	365
Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	370	375	380
Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	385	390	395
Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	405	410	415
His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	420	425	430

Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu
 435 440 445
 Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys
 450 455 460
 Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu
 465 470 475 480
 Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met
 485 490 495
 Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val
 500 505 510
 Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr
 515 520 525
 Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp
 530 535 540
 Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His
 545 550 555 560
 Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln
 565 570 575
 Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu
 580 585 590
 Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys
 595 600 605
 Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys
 610 615 620
 Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 625 630 635

<210> 94

<211> 635

<212> PRT

<213> Homo sapiens

<400> 94

Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15

Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30

His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45

Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val

50		55		60	
Lys 65	Leu Val	Asn Glu Val 70	Thr Glu Phe Ala	Lys 75	Thr Cys Val Ala Asp 80
Glu 85	Ser Ala Glu	Asn Cys Asp	Lys Ser Leu 90	His Thr Leu Phe Gly 95	Asp
Lys 100	Leu Cys Thr	Val Ala Thr	Leu Arg Glu 105	Thr Tyr Gly	Glu Met Ala 110
Asp 115	Cys Cys Ala	Lys Gln Glu	Pro Glu Arg	Asn Glu Cys 125	Phe Leu Gln
His 130	Lys Asp Asp	Asn Pro Asn 135	Leu Pro Arg	Leu Val Arg 140	Pro Glu Val
Asp 145	Val Met Cys	Thr Ala Phe 150	His Asp Asn	Glu Glu Thr 155	Phe Leu Lys 160
Lys 165	Tyr Leu Tyr	Glu Ile Ala	Arg Arg His 170	Pro Tyr Phe Tyr 175	Ala Pro
Glu 180	Leu Leu Phe	Phe Ala Lys	Arg Tyr Lys 185	Ala Ala Phe Thr 190	Glu Cys
Cys 195	Gln Ala Ala	Asp Lys Ala	Ala Cys Leu 200	Leu Pro Lys 205	Leu Asp Glu
Leu 210	Arg Asp Glu	Gly Lys Ala 215	Ser Ser Ala	Lys Gln Arg 220	Leu Lys Cys
Ala 225	Ser Leu Gln	Lys Phe Gly 230	Glu Arg Ala	Phe Lys Ala 235	Trp Ala Val 240
Ala 245	Arg Leu Ser	Gln Arg Phe 245	Pro Lys Ala	Glu Phe Ala 250	Glu Val Ser 255
Lys 260	Leu Val Thr	Asp Leu Thr	Lys Val His 265	Thr Glu Cys Cys 270	His Gly
Asp 275	Leu Leu Glu	Cys Ala Asp	Asp Arg Ala 280	Asp Leu Ala 285	Lys Tyr Ile
Cys 290	Glu Asn Gln	Asp Ser Ile 295	Ser Ser Lys	Leu Lys Glu 300	Cys Cys Glu
Lys 305	Pro Leu Leu	Glu Lys Ser 310	His Cys Ile	Ala Glu Val 315	Glu Asn Asp 320
Glu 325	Met Pro Ala	Asp Leu Pro	Ser Leu Ala 330	Ala Asp Phe Val 335	Glu Ser
Lys 340	Asp Val Cys	Lys Asn Tyr	Ala Glu Ala 345	Lys Asp Val 350	Phe Leu Gly
Met	Phe Leu Tyr	Glu Tyr Ala	Arg Arg His	Pro Asp Tyr	Ser Val Val

355					360					365					
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys
370						375					380				
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu
385					390					395					400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys
				405					410					415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu
			420					425					430		
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val
		435					440					445			
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His
450						455					460				
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val
465					470					475					480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg
				485					490					495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe
			500					505					510		
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala
		515					520					525			
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu
						535					540				
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys
545					550					555					560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala
				565					570					575	
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe
			580					585					590		
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly
			595				600					605			
Leu	Gly	Asp	Asp	Asp	Asp	Cys	Gly	Trp	Ile	Gly	Phe	Ala	Asn	Phe	His
	610					615					620				
Leu	Cys	Leu	His	Gly	Asp	Pro	Glu	Gly	Gly	Gly					
625						630					635				

<210> 95
 <211> 772

<212> PRT

<213> Homo sapiens

<400> 95

Met	Thr	Asn	Lys	Cys	Leu	Leu	Gln	Ile	Ala	Leu	Leu	Leu	Cys	Phe	Ser	
1				5					10					15		
Thr	Thr	Ala	Leu	Ser	Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	
			20					25					30			
Ser	Ser	Asn	Phe	Gln	Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	
		35					40					45				
Leu	Glu	Tyr	Cys	Leu	Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	
	50					55					60					
Ile	Lys	Gln	Leu	Gln	Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	
65					70					75					80	
Tyr	Glu	Met	Leu	Gln	Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	
				85					90					95		
Ser	Thr	Gly	Trp	Asn	Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	
			100					105					110			
Tyr	His	Gln	Ile	Asn	His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	
		115					120					125				
Lys	Glu	Asp	Phe	Thr	Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	
	130					135					140					
Arg	Tyr	Tyr	Gly	Arg	Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	
145					150					155					160	
His	Cys	Ala	Trp	Thr	Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	
				165					170					175		
Phe	Ile	Asn	Arg	Leu	Thr	Gly	Tyr	Leu	Arg	Asn	Asp	Ala	His	Lys	Ser	
			180					185					190			
Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	
	195						200					205				
Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	
	210				215						220					
Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	
225					230					235					240	
Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	
				245					250					255		
Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	
			260					265					270			
Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	
		275					280					285				

Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg
290 295 300
Pro Glu Val Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr
305 310 315 320
Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe
325 330 335
Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe
340 345 350
Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys
355 360 365
Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg
370 375 380
Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala
385 390 395 400
Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala
405 410 415
Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys
420 425 430
Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala
435 440 445
Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu
450 455 460
Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val
465 470 475 480
Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe
485 490 495
Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val
500 505 510
Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr
515 520 525
Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu
530 535 540
Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val
545 550 555 560
Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys
565 570 575
Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn
580 585 590

Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro
 595 600 605
 Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys
 610 615 620
 Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu
 625 630 635 640
 Ser Val Val Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val
 645 650 655
 Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg
 660 665 670
 Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu
 675 680 685
 Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser
 690 695 700
 Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val
 705 710 715 720
 Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp
 725 730 735
 Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu
 740 745 750
 Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala
 755 760 765
 Ala Leu Gly Leu
 770

<210> 96
 <211> 775
 <212> PRT
 <213> Homo sapiens

<400> 96
 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30
 His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45
 Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60

Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	65	70	75	80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	85	90	95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	100	105	110	
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	115	120	125	
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	130	135	140	
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	145	150	155	160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	165	170	175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	180	185	190	
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	195	200	205	
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	210	215	220	
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	225	230	235	240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	245	250	255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	260	265	270	
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	275	280	285	
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	290	295	300	
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	305	310	315	320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	325	330	335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	340	345	350	
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	355	360	365	

Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 370 375 380
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 385 390 395 400
 Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
 405 410 415
 Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
 420 425 430
 Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
 435 440 445
 Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
 450 455 460
 Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
 465 470 475 480
 Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
 485 490 495
 Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
 500 505 510
 Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe
 610 615 620
 Gln Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys
 625 630 635 640
 Leu Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu
 645 650 655
 Gln Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu
 660 665 670

Gln Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp
 675 680 685
 Asn Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile
 690 695 700
 Asn His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe
 705 710 715 720
 Thr Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly
 725 730 735
 Arg Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp
 740 745 750
 Thr Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg
 755 760 765
 Leu Thr Gly Tyr Leu Arg Asn
 770 775

<210> 97
 <211> 772
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (240)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (270)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 97
 Met Thr Asn Lys Cys Leu Leu Gln Ile Ala Leu Leu Leu Cys Phe Ser
 1 5 10 15
 Thr Thr Ala Leu Ser Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg
 20 25 30
 Ser Ser Asn Phe Gln Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg
 35 40 45
 Leu Glu Tyr Cys Leu Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu
 50 55 60
 Ile Lys Gln Leu Gln Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile
 65 70 75 80
 Tyr Glu Met Leu Gln Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser
 85 90 95
 Ser Thr Gly Trp Asn Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val

100					105					110					
Tyr	His	Gln	Ile	Asn	His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu
		115					120					125			
Lys	Glu	Asp	Phe	Thr	Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys
	130					135					140				
Arg	Tyr	Tyr	Gly	Arg	Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser
145					150					155					160
His	Cys	Ala	Trp	Thr	Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr
				165					170					175	
Phe	Ile	Asn	Arg	Leu	Thr	Gly	Tyr	Leu	Arg	Asn	Asp	Ala	His	Lys	Ser
			180					185					190		
Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala
		195					200					205			
Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu
	210					215					220				
Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Xaa
225					230					235					240
Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu
				245					250					255	
Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Xaa	Tyr	Gly
			260					265					270		
Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys
		275					280					285			
Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg
	290					295					300				
Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr
305					310					315					320
Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe
				325					330					335	
Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe
			340					345					350		
Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys
		355					360					365			
Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg
	370					375					380				
Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala
385					390					395					400
Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala

405								410				415			
Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys
			420						425				430		
Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala
		435					440					445			
Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu
	450					455					460				
Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val
465					470					475					480
Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe
				485					490					495	
Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val
			500						505				510		
Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr
		515					520					525			
Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu
	530					535						540			
Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val
545					550					555					560
Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys
				565					570					575	
Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn
			580						585				590		
Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro
		595					600					605			
Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys
	610					615						620			
Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu
625					630					635					640
Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val
				645					650					655	
Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg
			660						665				670		
Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu
		675					680					685			
Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser
	690					695					700				
Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val

705		710		715		720									
Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp
				725					730					735	
Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu
			740					745					750		
Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala
			755				760						765		
Ala	Leu	Gly	Leu												
	770														

<210> 98
 <211> 775
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (487)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 98
Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15
Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
20 25 30
His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
35 40 45
Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
50 55 60
Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
65 70 75 80
Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
85 90 95
Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
100 105 110
Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
115 120 125
His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
130 135 140
Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
145 150 155 160

Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
 165 170 175
 Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
 180 185 190
 Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu
 195 200 205
 Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys
 210 215 220
 Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val
 225 230 235 240
 Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser
 245 250 255
 Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly
 260 265 270
 Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile
 275 280 285
 Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu
 290 295 300
 Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp
 305 310 315 320
 Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser
 325 330 335
 Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly
 340 345 350
 Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val
 355 360 365
 Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 370 375 380
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 385 390 395 400
 Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
 405 410 415
 Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
 420 425 430
 Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
 435 440 445
 Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
 450 455 460

Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	465	470	475	480
Leu	Asn	Gln	Leu	Cys	Val	Xaa	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	485	490	495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	500	505	510	
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	515	520	525	
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	530	535	540	
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	545	550	555	560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	565	570	575	
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	580	585	590	
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	595	600	605	
Leu	Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	610	615	620	
Gln	Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	625	630	635	640
Leu	Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	645	650	655	
Gln	Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	660	665	670	
Gln	Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	675	680	685	
Asn	Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	690	695	700	
Asn	His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	705	710	715	720
Thr	Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	725	730	735	
Arg	Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	740	745	750	
Thr	Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	755	760	765	

Leu Thr Gly Tyr Leu Arg Asn
770 775

<210> 99
<211> 752
<212> PRT
<213> Homo sapiens

<400> 99
Met His Trp Gly Thr Leu Cys Gly Phe Leu Trp Leu Trp Pro Tyr Leu
1 5 10 15
Phe Tyr Val Gln Ala Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys
20 25 30
Thr Leu Ile Lys Thr Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr
35 40 45
Gln Ser Val Ser Ser Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro
50 55 60
Gly Leu His Pro Ile Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala
65 70 75 80
Val Tyr Gln Gln Ile Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln
85 90 95
Ile Ser Asn Asp Leu Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala
100 105 110
Phe Ser Lys Ser Cys His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu
115 120 125
Asp Ser Leu Gly Gly Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val
130 135 140
Val Ala Leu Ser Arg Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln
145 150 155 160
Leu Asp Leu Ser Pro Gly Cys Asp Ala His Lys Ser Glu Val Ala His
165 170 175
Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile
180 185 190
Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys
195 200 205
Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu
210 215 220
Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys
225 230 235 240
Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp
245 250 255

Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His		
			260					265					270				
Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp		
		275					280					285					
Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys		
	290					295					300						
Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu		
305					310					315					320		
Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys		
				325					330					335			
Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu		
			340					345					350				
Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala		
		355					360					365					
Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala		
	370					375					380						
Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys		
385					390					395					400		
Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp		
				405					410					415			
Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys		
			420					425					430				
Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys		
		435					440					445					
Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu		
	450					455					460						
Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys		
465					470					475					480		
Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met		
				485					490					495			
Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu		
			500					505					510				
Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys		
		515					520					525					
Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe		
	530					535					540						
Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu		
545					550					555					560		

Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val
 565 570 575
 Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu
 580 585 590
 Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro
 595 600 605
 Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu
 610 615 620
 Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val
 625 630 635 640
 Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser
 645 650 655
 Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu
 660 665 670
 Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg
 675 680 685
 Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro
 690 695 700
 Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala
 705 710 715 720
 Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala
 725 730 735
 Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 740 745 750

<210> 100

<211> 755

<212> PRT

<213> Homo sapiens

<400> 100

Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15

Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30

His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45

Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60

Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
 65 70 75 80
 Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
 85 90 95
 Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
 100 105 110
 Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
 115 120 125
 His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
 130 135 140
 Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
 145 150 155 160
 Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
 165 170 175
 Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
 180 185 190
 Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu
 195 200 205
 Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys
 210 215 220
 Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val
 225 230 235 240
 Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser
 245 250 255
 Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly
 260 265 270
 Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile
 275 280 285
 Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu
 290 295 300
 Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp
 305 310 315 320
 Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser
 325 330 335
 Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly
 340 345 350
 Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val
 355 360 365

Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 370 375 380
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 385 390 395 400
 Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
 405 410 415
 Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
 420 425 430
 Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
 435 440 445
 Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
 450 455 460
 Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
 465 470 475 480
 Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
 485 490 495
 Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
 500 505 510
 Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys
 610 615 620
 Thr Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser
 625 630 635 640
 Ser Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro
 645 650 655
 Ile Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala Val Tyr Gln Gln
 660 665 670

Ile Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln Ile Ser Asn Asp
 675 680 685
 Leu Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala Phe Ser Lys Ser
 690 695 700
 Cys His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu Asp Ser Leu Gly
 705 710 715 720
 Gly Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser
 725 730 735
 Arg Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Asp Leu Ser
 740 745 750
 Pro Gly Cys
 755

<210> 101
 <211> 755
 <212> PRT
 <213> Homo sapiens

<400> 101
 Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Ser Leu Asp Lys Arg Val Pro Ile Gln Lys Val Gln Asp
 20 25 30
 Asp Thr Lys Thr Leu Ile Lys Thr Ile Val Thr Arg Ile Asn Asp Ile
 35 40 45
 Ser His Thr Gln Ser Val Ser Ser Lys Gln Lys Val Thr Gly Leu Asp
 50 55 60
 Phe Ile Pro Gly Leu His Pro Ile Leu Thr Leu Ser Lys Met Asp Gln
 65 70 75 80
 Thr Leu Ala Val Tyr Gln Gln Ile Leu Thr Ser Met Pro Ser Arg Asn
 85 90 95
 Val Ile Gln Ile Ser Asn Asp Leu Glu Asn Leu Arg Asp Leu Leu His
 100 105 110
 Val Leu Ala Phe Ser Lys Ser Cys His Leu Pro Trp Ala Ser Gly Leu
 115 120 125
 Glu Thr Leu Asp Ser Leu Gly Gly Val Leu Glu Ala Ser Gly Tyr Ser
 130 135 140
 Thr Glu Val Val Ala Leu Ser Arg Leu Gln Gly Ser Leu Gln Asp Met
 145 150 155 160
 Leu Trp Gln Leu Asp Leu Ser Pro Gly Cys Asp Ala His Lys Ser Glu
 165 170 175

Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu
			180					185					190		
Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp
		195					200					205			
His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val
	210					215					220				
Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe
225					230					235					240
Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu
				245					250					255	
Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe
			260					265					270		
Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro
		275					280						285		
Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe
	290					295					300				
Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr
305					310					315					320
Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr
				325					330					335	
Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu
			340					345					350		
Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu
	355						360					365			
Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp
	370					375					380				
Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu
385					390					395					400
Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys
			405						410					415	
His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys
			420					425					430		
Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys
		435					440					445			
Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu
	450					455					460				
Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val
465					470					475					480

Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe
 485 490 495
 Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser
 500 505 510
 Val Val Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu
 515 520 525
 Lys Cys Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe
 530 535 540
 Asp Glu Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln
 545 550 555 560
 Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala
 565 570 575
 Leu Leu Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr
 580 585 590
 Leu Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys
 595 600 605
 Lys His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser
 610 615 620
 Val Val Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser
 625 630 635 640
 Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro
 645 650 655
 Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe
 660 665 670
 Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu
 675 680 685
 Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys
 690 695 700
 His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp
 705 710 715 720
 Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr
 725 730 735
 Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala
 740 745 750
 Leu Gly Leu
 755

<210> 102
 <211> 755
 <212> PRT
 <213> Homo sapiens

<400> 102

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
	65				70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120				125				
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
	145				150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
			165						170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
	225					230				235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245				250						255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly
			260					265					270		

Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	275	280	285	
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	290	295	300	
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	305	310	315	320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	325	330	335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	340	345	350	
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	355	360	365	
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	370	375	380	
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	385	390	395	400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	405	410	415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	420	425	430	
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	435	440	445	
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	450	455	460	
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	465	470	475	480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	485	490	495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	500	505	510	
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	515	520	525	
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	530	535	540	
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	545	550	555	560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	565	570	575	

Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys
 610 615 620
 Thr Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser
 625 630 635 640
 Ser Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro
 645 650 655
 Ile Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala Val Tyr Gln Gln
 660 665 670
 Ile Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln Ile Ser Asn Asp
 675 680 685
 Leu Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala Phe Ser Lys Ser
 690 695 700
 Cys His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu Asp Ser Leu Gly
 705 710 715 720
 Gly Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser
 725 730 735
 Arg Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Asp Leu Ser
 740 745 750
 Pro Gly Cys
 755

<210> 103
 <211> 774
 <212> PRT
 <213> Homo sapiens

<400> 103
 Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Ser Leu Asp Lys Arg Cys Asp Leu Pro Gln Thr His Ser
 20 25 30
 Leu Gly Ser Arg Arg Thr Leu Met Leu Leu Ala Gln Met Arg Arg Ile
 35 40 45
 Ser Leu Phe Ser Cys Leu Lys Asp Arg His Asp Phe Gly Phe Pro Gln
 50 55 60
 Glu Glu Phe Gly Asn Gln Phe Gln Lys Ala Glu Thr Ile Pro Val Leu
 65 70 75 80

His	Glu	Met	Ile	Gln	Gln	Ile	Phe	Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser		
				85					90					95			
Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu	Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu		
			100					105					110				
Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu	Ala	Cys	Val	Ile	Gln	Gly	Val	Gly		
		115					120					125					
Val	Thr	Glu	Thr	Pro	Leu	Met	Lys	Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg		
	130					135					140						
Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu	Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser		
145					150					155					160		
Pro	Cys	Ala	Trp	Glu	Val	Val	Arg	Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser		
				165					170					175			
Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser	Leu	Arg	Ser	Lys	Glu	Asp	Ala	His		
			180					185					190				
Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe		
		195					200					205					
Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro		
	210					215					220						
Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys		
225					230					235					240		
Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His		
				245					250					255			
Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr		
			260					265					270				
Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn		
		275					280					285					
Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu		
	290					295					300						
Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu		
305					310					315					320		
Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro		
				325					330					335			
Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala		
			340					345					350				
Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu		
		355					360					365					
Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys		
	370					375					380						

Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	385	390	395	400
Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu		405	410	415
Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr		420	425	430
Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp		435	440	445
Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu		450	455	460
Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	465	470	475	480
Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala		485	490	495
Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys		500	505	510
Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro		515	520	525
Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	530	535	540	
Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	545	550	555	560
Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu		565	570	575
Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe		580	585	590
Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser		595	600	605
Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	610	615	620	
Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	625	630	635	640
Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr		645	650	655
Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn		660	665	670
Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro		675	680	685

Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr
 690 695 700
 Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu
 705 710 715 720
 Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val
 725 730 735
 Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp
 740 745 750
 Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser
 755 760 765
 Gln Ala Ala Leu Gly Leu
 770

<210> 104
 <211> 672
 <212> PRT
 <213> Homo sapiens

<400> 104
 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30
 His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45
 Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60
 Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
 65 70 75 80
 Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
 85 90 95
 Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
 100 105 110
 Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
 115 120 125
 His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
 130 135 140
 Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
 145 150 155 160

Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
 165 170 175
 Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
 180 185 190
 Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu
 195 200 205
 Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys
 210 215 220
 Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val
 225 230 235 240
 Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser
 245 250 255
 Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly
 260 265 270
 Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile
 275 280 285
 Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu
 290 295 300
 Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp
 305 310 315 320
 Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser
 325 330 335
 Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly
 340 345 350
 Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val
 355 360 365
 Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 370 375 380
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 385 390 395 400
 Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
 405 410 415
 Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
 420 425 430
 Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
 435 440 445
 Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
 450 455 460

Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
 465 470 475 480
 Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
 485 490 495
 Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
 500 505 510
 Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu
 610 615 620
 Tyr Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly
 625 630 635 640
 Tyr Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln
 645 650 655
 Cys Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 660 665 670

<210> 105

<211> 672

<212> PRT

<213> Homo sapiens

<400> 105

Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Ser Val Asp Lys Arg Phe Val Asn Gln His Leu Cys Gly
 20 25 30
 Ser His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Glu Arg Gly Phe
 35 40 45
 Phe Tyr Thr Pro Lys Thr Gly Tyr Gly Ser Ser Ser Arg Arg Ala Pro
 50 55 60

Gln	Thr	Gly	Ile	Val	Glu	Gln	Cys	Cys	Thr	Ser	Ile	Cys	Ser	Leu	Tyr	65	70	75	80
Gln	Leu	Glu	Asn	Tyr	Cys	Asn	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	85	90	95	
Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	100	105	110	
Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	115	120	125	
Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	130	135	140	
Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	145	150	155	160
Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	165	170	175	
Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	180	185	190	
Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	195	200	205	
Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	210	215	220	
Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	225	230	235	240
Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	245	250	255	
Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	260	265	270	
Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	275	280	285	
Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	290	295	300	
Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	305	310	315	320
Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	325	330	335	
Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	340	345	350	
Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	355	360	365	

Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu
 370 375 380
 Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys
 385 390 395 400
 Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met
 405 410 415
 Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu
 420 425 430
 Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys
 435 440 445
 Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe
 450 455 460
 Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu
 465 470 475 480
 Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val
 485 490 495
 Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu
 500 505 510
 Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro
 515 520 525
 Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu
 530 535 540
 Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val
 545 550 555 560
 Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser
 565 570 575
 Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu
 580 585 590
 Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg
 595 600 605
 Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro
 610 615 620
 Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala
 625 630 635 640
 Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala
 645 650 655
 Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 660 665 670

<210> 106
 <211> 667
 <212> PRT
 <213> Homo sapiens

<400> 106

Met	Lys	Trp	Val	Thr	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Gly	Val	Phe	Arg	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
	65				70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
145					150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
225					230					235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245					250					255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly

260					265					270					
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile
		275					280					285			
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu
	290					295					300				
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp
305					310					315					320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser
				325					330					335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly
			340					345					350		
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val
		355					360					365			
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys
	370					375					380				
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu
385					390					395					400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys
				405					410					415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu
			420				425						430		
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val
		435					440					445			
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His
	450					455					460				
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val
465					470					475					480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg
				485					490					495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe
			500					505					510		
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala
		515					520					525			
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu
	530					535					540				
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys
545					550					555					560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala

				565						570					575
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe
			580					585					590		
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly
			595				600					605			
Leu	Phe	Val	Asn	Gln	His	Leu	Cys	Gly	Ser	His	Leu	Val	Glu	Ala	Leu
			610			615					620				
Tyr	Leu	Val	Cys	Gly	Glu	Arg	Gly	Phe	Phe	Tyr	Thr	Pro	Lys	Thr	Gly
625					630					635					640
Gly	Gly	Pro	Gly	Lys	Arg	Gly	Ile	Val	Glu	Gln	Cys	Cys	Thr	Ser	Ile
				645					650					655	
Cys	Ser	Leu	Tyr	Gln	Leu	Glu	Asn	Tyr	Cys	Asn					
			660					665							

<210> 107
 <211> 667
 <212> PRT
 <213> Homo sapiens

<400> 107															
Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Phe	Val	Asn	Gln	His	Leu	Cys	Gly
			20					25					30		
Ser	His	Leu	Val	Glu	Ala	Leu	Tyr	Leu	Val	Cys	Gly	Glu	Arg	Gly	Phe
		35					40					45			
Phe	Tyr	Thr	Pro	Lys	Thr	Gly	Gly	Gly	Pro	Gly	Lys	Arg	Gly	Ile	Val
	50					55					60				
Glu	Gln	Cys	Cys	Thr	Ser	Ile	Cys	Ser	Leu	Tyr	Gln	Leu	Glu	Asn	Tyr
65					70					75				80	
Cys	Asn	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu
				85					90					95	
Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr
			100					105					110		
Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val
		115					120					125			
Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys
	130					135					140				
Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala
145					150					155					160

Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	165	170	175
Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	180	185	190
Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	195	200	205
Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	210	215	220
Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	225	230	235
Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	245	250	255
Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	260	265	270
Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	275	280	285
Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	290	295	300
Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	305	310	315
Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	325	330	335
Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	340	345	350
Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	355	360	365
Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	370	375	380
Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	385	390	395
Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	405	410	415
Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	420	425	430
Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	435	440	445
His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	450	455	460

Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu
 465 470 475 480
 Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys
 485 490 495
 Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu
 500 505 510
 Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met
 515 520 525
 Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val
 530 535 540
 Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr
 545 550 555 560
 Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp
 565 570 575
 Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His
 580 585 590
 Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln
 595 600 605
 Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu
 610 615 620
 Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys
 625 630 635 640
 Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys
 645 650 655
 Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 660 665

<210> 108

<211> 699

<212> PRT

<213> Homo sapiens

<400> 108

Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Ser Leu Asp Lys Arg Lys Thr Leu Cys Ser Met Glu Glu
 20 25 30
 Ala Ile Asn Glu Arg Ile Gln Glu Val Ala Gly Ser Leu Ile Phe Arg
 35 40 45
 Ala Ile Ser Ser Ile Gly Leu Glu Cys Gln Ser Val Thr Ser Arg Gly

50					55					60					
Asp	Leu	Ala	Thr	Cys	Pro	Arg	Gly	Phe	Ala	Val	Thr	Gly	Cys	Thr	Cys
65					70					75					80
Gly	Ser	Ala	Cys	Gly	Ser	Trp	Asp	Val	Arg	Ala	Glu	Thr	Thr	Cys	His
				85					90					95	
Cys	Gln	Cys	Ala	Gly	Met	Asp	Trp	Thr	Gly	Ala	Arg	Cys	Cys	Arg	Val
			100					105					110		
Gln	Pro	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu
		115					120					125			
Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr
	130					135					140				
Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val
145					150					155					160
Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys
				165					170					175	
Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala
			180					185					190		
Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln
		195					200					205			
Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro
	210					215					220				
Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala
225					230					235					240
Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile
			245						250					255	
Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala
			260					265					270		
Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys
		275					280					285			
Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys
	290					295					300				
Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe
305					310					315					320
Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg
				325					330					335	
Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu
			340					345					350		
Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala

355					360					365					
Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser
	370					375					380				
Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys
385					390					395					400
Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu
				405					410					415	
Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn
			420					425					430		
Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr
		435					440					445			
Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala
	450				455					460					
Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro
465					470					475					480
His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu
				485					490					495	
Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu
			500					505					510		
Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys
		515					520					525			
Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu
	530				535					540					
Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met
545					550					555					560
Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val
				565					570					575	
Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr
			580					585					590		
Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp
		595					600					605			
Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His
		610				615						620			
Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln
625					630					635					640
Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu
				645					650					655	
Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys

			660						665						670
Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys
		675					680					685			
Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	Leu					
	690					695									

<210> 109
 <211> 699
 <212> PRT
 <213> Homo sapiens

<400> 109															
Met	Lys	Trp	Val	Thr	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Gly	Val	Phe	Arg	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
	65				70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
	145				150				155						160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				

Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	225	230	235	240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	245	250	255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	260	265	270	
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	275	280	285	
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	290	295	300	
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	305	310	315	320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	325	330	335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	340	345	350	
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	355	360	365	
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	370	375	380	
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	385	390	395	400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	405	410	415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	420	425	430	
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	435	440	445	
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	450	455	460	
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	465	470	475	480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	485	490	495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	500	505	510	
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	515	520	525	

Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu
530						535					540				
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys
545					550					555					560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala
				565					570					575	
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe
			580					585						590	
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly
			595				600					605			
Leu	Lys	Thr	Leu	Cys	Ser	Met	Glu	Glu	Ala	Ile	Asn	Glu	Arg	Ile	Gln
			610			615					620				
Glu	Val	Ala	Gly	Ser	Leu	Ile	Phe	Arg	Ala	Ile	Ser	Ser	Ile	Gly	Leu
625					630					635					640
Glu	Cys	Gln	Ser	Val	Thr	Ser	Arg	Gly	Asp	Leu	Ala	Thr	Cys	Pro	Arg
				645					650					655	
Gly	Phe	Ala	Val	Thr	Gly	Cys	Thr	Cys	Gly	Ser	Ala	Cys	Gly	Ser	Trp
			660					665						670	
Asp	Val	Arg	Ala	Glu	Thr	Thr	Cys	His	Cys	Gln	Cys	Ala	Gly	Met	Asp
			675				680					685			
Trp	Thr	Gly	Ala	Arg	Cys	Cys	Arg	Val	Gln	Pro					
			690			695									

<210> 110

<211> 114

<212> PRT

<213> Homo sapiens

<400> 110

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Lys	Thr	Leu	Cys	Ser	Met	Glu	Glu
			20					25					30		
Ala	Ile	Asn	Glu	Arg	Ile	Gln	Glu	Val	Ala	Gly	Ser	Leu	Ile	Phe	Arg
		35					40					45			
Ala	Ile	Ser	Ser	Ile	Gly	Leu	Glu	Cys	Gln	Ser	Val	Thr	Ser	Arg	Gly
	50					55					60				
Asp	Leu	Ala	Thr	Cys	Pro	Arg	Gly	Phe	Ala	Val	Thr	Gly	Cys	Thr	Cys
65					70					75					80

Gly Ser Ala Cys Gly Ser Trp Asp Val Arg Ala Glu Thr Thr Cys His
 85 90 95
 Cys Gln Cys Ala Gly Met Asp Trp Thr Gly Ala Arg Cys Cys Arg Val
 100 105 110
 Gln Pro

 <210> 111
 <211> 693
 <212> PRT
 <213> Homo sapiens

 <400> 111
 Met Lys Ala Leu Cys Leu Leu Leu Leu Pro Val Leu Gly Leu Leu Val
 1 5 10 15
 Ser Ser Lys Thr Leu Cys Ser Met Glu Glu Ala Ile Asn Glu Arg Ile
 20 25 30
 Gln Glu Val Ala Gly Ser Leu Ile Phe Arg Ala Ile Ser Ser Ile Gly
 35 40 45
 Leu Glu Cys Gln Ser Val Thr Ser Arg Gly Asp Leu Ala Thr Cys Pro
 50 55 60
 Arg Gly Phe Ala Val Thr Gly Cys Thr Cys Gly Ser Ala Cys Gly Ser
 65 70 75 80
 Trp Asp Val Arg Ala Glu Thr Thr Cys His Cys Gln Cys Ala Gly Met
 85 90 95
 Asp Trp Thr Gly Ala Arg Cys Cys Arg Val Gln Pro Asp Ala His Lys
 100 105 110
 Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys
 115 120 125
 Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe
 130 135 140
 Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr
 145 150 155 160
 Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr
 165 170 175
 Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr
 180 185 190
 Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu
 195 200 205
 Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val
 210 215 220

Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	225	230	235	240
Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	245	250	255	
Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	260	265	270	
Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	275	280	285	
Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	290	295	300	
Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	305	310	315	320
Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	325	330	335	
Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	340	345	350	
Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	355	360	365	
Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	370	375	380	
Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	385	390	395	400
Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	405	410	415	
Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	420	425	430	
Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	435	440	445	
Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	450	455	460	
Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	465	470	475	480
Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	485	490	495	
Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	500	505	510	
Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	515	520	525	

Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys
 530 535 540
 Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr
 545 550 555 560
 Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro
 565 570 575
 Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg
 580 585 590
 Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys
 595 600 605
 Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu
 610 615 620
 Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu
 625 630 635 640
 Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met
 645 650 655
 Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys
 660 665 670
 Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln
 675 680 685
 Ala Ala Leu Gly Leu
 690

<210> 112
 <211> 693
 <212> PRT
 <213> Homo sapiens

<400> 112
 Met Lys Ala Leu Cys Leu Leu Leu Leu Pro Val Leu Gly Leu Leu Val
 1 5 10 15
 Ser Ser Lys Thr Leu Cys Ser Met Glu Glu Ala Ile Asn Glu Arg Ile
 20 25 30
 Gln Glu Val Ala Gly Ser Leu Ile Phe Arg Ala Ile Ser Ser Ile Gly
 35 40 45
 Leu Glu Cys Gln Ser Val Thr Ser Arg Gly Asp Leu Ala Thr Cys Pro
 50 55 60
 Arg Gly Phe Ala Val Thr Gly Cys Thr Cys Gly Ser Ala Cys Gly Ser
 65 70 75 80
 Trp Asp Val Arg Ala Glu Thr Thr Cys His Cys Gln Cys Ala Gly Met

85								90				95			
Asp	Trp	Thr	Gly	Ala	Arg	Cys	Cys	Arg	Val	Gln	Pro	Asp	Ala	His	Lys
			100					105					110		
Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys
		115					120					125			
Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe
	130					135					140				
Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr
145					150					155					160
Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr
				165					170					175	
Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr
			180					185					190		
Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu
		195					200					205			
Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val
	210					215					220				
Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu
225					230					235					240
Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr
				245					250					255	
Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala
			260					265					270		
Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro
		275					280					285			
Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln
	290					295					300				
Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys
305					310					315					320
Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe
				325					330					335	
Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu
			340					345					350		
Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu
		355					360					365			
Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys
	370					375					380				
Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu

385		390		395		400									
Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp
				405					410					415	
Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp
			420					425					430		
Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp
		435					440					445			
Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr
	450					455					460				
Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys
465					470					475					480
Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile
				485					490					495	
Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln
			500					505					510		
Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr
		515					520					525			
Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys
	530					535					540				
Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr
545					550					555					560
Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro
				565					570					575	
Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg
			580					585					590		
Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys
		595					600					605			
Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu
	610					615					620				
Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu
625					630					635					640
Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met
				645					650					655	
Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys
			660					665					670		
Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln
		675					680					685			
Ala	Ala	Leu	Gly	Leu											

690

<210> 113
<211> 1016
<212> PRT
<213> Homo sapiens

<400> 113

Met	Lys	Trp	Val	Thr	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Gly	Val	Phe	Arg	Arg	Lys	Pro	Leu	Gln	Ser	Trp	Gly	Arg
			20					25					30		
Gly	Ser	Ala	Gly	Gly	Asn	Ala	His	Ser	Pro	Leu	Gly	Val	Pro	Gly	Gly
		35					40					45			
Gly	Leu	Pro	Glu	His	Thr	Phe	Asn	Leu	Lys	Met	Phe	Leu	Glu	Asn	Val
	50					55					60				
Lys	Val	Asp	Phe	Leu	Arg	Ser	Leu	Asn	Leu	Ser	Gly	Val	Pro	Ser	Gln
65					70					75					80
Asp	Lys	Thr	Arg	Val	Glu	Pro	Pro	Gln	Tyr	Met	Ile	Asp	Leu	Tyr	Asn
				85					90					95	
Arg	Tyr	Thr	Ser	Asp	Lys	Ser	Thr	Thr	Pro	Ala	Ser	Asn	Ile	Val	Arg
			100					105					110		
Ser	Phe	Ser	Met	Glu	Asp	Ala	Ile	Ser	Ile	Thr	Ala	Thr	Glu	Asp	Phe
		115					120					125			
Pro	Phe	Gln	Lys	His	Ile	Leu	Leu	Phe	Asn	Ile	Ser	Ile	Pro	Arg	His
	130					135					140				
Glu	Gln	Ile	Thr	Arg	Ala	Glu	Leu	Arg	Leu	Tyr	Val	Ser	Cys	Gln	Asn
145					150					155					160
His	Val	Asp	Pro	Ser	His	Asp	Leu	Lys	Gly	Ser	Val	Val	Ile	Tyr	Asp
				165					170					175	
Val	Leu	Asp	Gly	Thr	Asp	Ala	Trp	Asp	Ser	Ala	Thr	Glu	Thr	Lys	Thr
			180					185					190		
Phe	Leu	Val	Ser	Gln	Asp	Ile	Gln	Asp	Glu	Gly	Trp	Glu	Thr	Leu	Glu
		195					200					205			
Val	Ser	Ser	Ala	Val	Lys	Arg	Trp	Val	Arg	Ser	Asp	Ser	Thr	Lys	Ser
	210					215					220				
Lys	Asn	Lys	Leu	Glu	Val	Thr	Val	Glu	Ser	His	Arg	Lys	Gly	Cys	Asp
225					230					235					240
Thr	Leu	Asp	Ile	Ser	Val	Pro	Pro	Gly	Ser	Arg	Asn	Leu	Pro	Phe	Phe
				245					250					255	

Val	Val	Phe	Ser	Asn	Asp	His	Ser	Ser	Gly	Thr	Lys	Glu	Thr	Arg	Leu		
			260					265					270				
Glu	Leu	Arg	Glu	Met	Ile	Ser	His	Glu	Gln	Glu	Ser	Val	Leu	Lys	Lys		
		275					280					285					
Leu	Ser	Lys	Asp	Gly	Ser	Thr	Glu	Ala	Gly	Glu	Ser	Ser	His	Glu	Glu		
	290					295					300						
Asp	Thr	Asp	Gly	His	Val	Ala	Ala	Gly	Ser	Thr	Leu	Ala	Arg	Arg	Lys		
305					310					315					320		
Arg	Ser	Ala	Gly	Ala	Gly	Ser	His	Cys	Gln	Lys	Thr	Ser	Leu	Arg	Val		
				325					330					335			
Asn	Phe	Glu	Asp	Ile	Gly	Trp	Asp	Ser	Trp	Ile	Ile	Ala	Pro	Lys	Glu		
			340					345						350			
Tyr	Glu	Ala	Tyr	Glu	Cys	Lys	Gly	Gly	Cys	Phe	Phe	Pro	Leu	Ala	Asp		
		355					360					365					
Asp	Val	Thr	Pro	Thr	Lys	His	Ala	Ile	Val	Gln	Thr	Leu	Val	His	Leu		
	370					375					380						
Lys	Phe	Pro	Thr	Lys	Val	Gly	Lys	Ala	Cys	Cys	Val	Pro	Thr	Lys	Leu		
385					390					395					400		
Ser	Pro	Ile	Ser	Val	Leu	Tyr	Lys	Asp	Asp	Met	Gly	Val	Pro	Thr	Leu		
				405					410					415			
Lys	Tyr	His	Tyr	Glu	Gly	Met	Ser	Val	Ala	Glu	Cys	Gly	Cys	Arg	Asp		
			420					425					430				
Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu		
		435					440					445					
Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln		
	450					455					460						
Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe		
465					470					475					480		
Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser		
				485					490					495			
Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg		
			500					505					510				
Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu		
		515					520					525					
Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro		
	530					535					540						
Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp		
545					550					555					560		

Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg		
				565					570					575			
His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr		
			580					585					590				
Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys		
		595					600					605					
Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser		
	610					615					620						
Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg		
625					630					635					640		
Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys		
				645					650					655			
Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val		
			660					665					670				
His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg		
		675					680					685					
Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser		
	690					695					700						
Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys		
705					710					715					720		
Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu		
				725					730					735			
Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu		
			740					745					750				
Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg		
		755					760					765					
His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr		
	770					775					780						
Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys		
785					790					795					800		
Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln		
				805					810					815			
Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr		
			820					825					830				
Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln		
		835					840					845					
Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val		
	850					855					860						

Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys Ala
 865 870 875 880
 Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His Glu
 885 890 895
 Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu
 900 905 910
 Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr
 915 920 925
 Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile
 930 935 940
 Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu
 945 950 955 960
 Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys
 965 970 975
 Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala
 980 985 990
 Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala
 995 1000 1005
 Ala Ser Gln Ala Ala Leu Gly Leu
 1010 1015

<210> 114
 <211> 1016
 <212> PRT
 <213> Homo sapiens

<400> 114
 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30
 His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45
 Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60
 Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
 65 70 75 80
 Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
 85 90 95
 Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala

100						105						110					
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln		
		115					120					125					
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val		
	130					135					140						
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys		
145					150					155					160		
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro		
				165					170					175			
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys		
			180					185					190				
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu		
		195					200					205					
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys		
	210					215					220						
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val		
225					230					235					240		
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser		
				245					250					255			
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly		
		260						265					270				
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile		
		275					280					285					
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu		
	290					295					300						
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp		
305					310					315					320		
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser		
				325					330					335			
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly		
			340					345					350				
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val		
	355						360					365					
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys		
	370					375					380						
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu		
385					390					395					400		
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys		

405						410						415					
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu		
			420					425					430				
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val		
		435					440					445					
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His		
	450					455					460						
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val		
465					470					475					480		
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg		
				485					490					495			
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe		
			500					505					510				
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala		
		515					520					525					
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu		
		530					535				540						
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys		
545					550					555					560		
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala		
				565					570					575			
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe		
			580					585					590				
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly		
		595					600					605					
Leu	Lys	Pro	Leu	Gln	Ser	Trp	Gly	Arg	Gly	Ser	Ala	Gly	Gly	Asn	Ala		
	610					615					620						
His	Ser	Pro	Leu	Gly	Val	Pro	Gly	Gly	Gly	Leu	Pro	Glu	His	Thr	Phe		
625					630					635					640		
Asn	Leu	Lys	Met	Phe	Leu	Glu	Asn	Val	Lys	Val	Asp	Phe	Leu	Arg	Ser		
				645					650					655			
Leu	Asn	Leu	Ser	Gly	Val	Pro	Ser	Gln	Asp	Lys	Thr	Arg	Val	Glu	Pro		
			660					665					670				
Pro	Gln	Tyr	Met	Ile	Asp	Leu	Tyr	Asn	Arg	Tyr	Thr	Ser	Asp	Lys	Ser		
		675					680					685					
Thr	Thr	Pro	Ala	Ser	Asn	Ile	Val	Arg	Ser	Phe	Ser	Met	Glu	Asp	Ala		
	690					695					700						
Ile	Ser	Ile	Thr	Ala	Thr	Glu	Asp	Phe	Pro	Phe	Gln	Lys	His	Ile	Leu		

705					710					715				720	
Leu	Phe	Asn	Ile	Ser	Ile	Pro	Arg	His	Glu	Gln	Ile	Thr	Arg	Ala	Glu
				725					730					735	
Leu	Arg	Leu	Tyr	Val	Ser	Cys	Gln	Asn	His	Val	Asp	Pro	Ser	His	Asp
			740					745					750		
Leu	Lys	Gly	Ser	Val	Val	Ile	Tyr	Asp	Val	Leu	Asp	Gly	Thr	Asp	Ala
		755					760					765			
Trp	Asp	Ser	Ala	Thr	Glu	Thr	Lys	Thr	Phe	Leu	Val	Ser	Gln	Asp	Ile
	770					775					780				
Gln	Asp	Glu	Gly	Trp	Glu	Thr	Leu	Glu	Val	Ser	Ser	Ala	Val	Lys	Arg
785					790					795					800
Trp	Val	Arg	Ser	Asp	Ser	Thr	Lys	Ser	Lys	Asn	Lys	Leu	Glu	Val	Thr
				805					810					815	
Val	Glu	Ser	His	Arg	Lys	Gly	Cys	Asp	Thr	Leu	Asp	Ile	Ser	Val	Pro
			820					825					830		
Pro	Gly	Ser	Arg	Asn	Leu	Pro	Phe	Phe	Val	Val	Phe	Ser	Asn	Asp	His
		835					840						845		
Ser	Ser	Gly	Thr	Lys	Glu	Thr	Arg	Leu	Glu	Leu	Arg	Glu	Met	Ile	Ser
	850					855					860				
His	Glu	Gln	Glu	Ser	Val	Leu	Lys	Lys	Leu	Ser	Lys	Asp	Gly	Ser	Thr
865					870					875					880
Glu	Ala	Gly	Glu	Ser	Ser	His	Glu	Glu	Asp	Thr	Asp	Gly	His	Val	Ala
				885					890					895	
Ala	Gly	Ser	Thr	Leu	Ala	Arg	Arg	Lys	Arg	Ser	Ala	Gly	Ala	Gly	Ser
			900					905					910		
His	Cys	Gln	Lys	Thr	Ser	Leu	Arg	Val	Asn	Phe	Glu	Asp	Ile	Gly	Trp
		915					920					925			
Asp	Ser	Trp	Ile	Ile	Ala	Pro	Lys	Glu	Tyr	Glu	Ala	Tyr	Glu	Cys	Lys
	930					935					940				
Gly	Gly	Cys	Phe	Phe	Pro	Leu	Ala	Asp	Asp	Val	Thr	Pro	Thr	Lys	His
945					950					955					960
Ala	Ile	Val	Gln	Thr	Leu	Val	His	Leu	Lys	Phe	Pro	Thr	Lys	Val	Gly
				965					970					975	
Lys	Ala	Cys	Cys	Val	Pro	Thr	Lys	Leu	Ser	Pro	Ile	Ser	Val	Leu	Tyr
			980					985					990		
Lys	Asp	Asp	Met	Gly	Val	Pro	Thr	Leu	Lys	Tyr	His	Tyr	Glu	Gly	Met
		995					1000						1005		
Ser	Val		Ala	Glu	Cys	Gly	Cys		Arg						

1010

1015

<210> 115

<211> 769

<212> PRT

<213> Homo sapiens

<400> 115

Met Leu Leu Gln Ala Phe Leu Phe Leu Leu Ala Gly Phe Ala Ala Lys
 1 5 10 15

Ile Ser Ala Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg
 20 25 30

Thr Leu Met Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys
 35 40 45

Leu Lys Asp Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn
 50 55 60

Gln Phe Gln Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln
 65 70 75 80

Gln Ile Phe Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp
 85 90 95

Glu Thr Leu Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn
 100 105 110

Asp Leu Glu Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro
 115 120 125

Leu Met Lys Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg
 130 135 140

Ile Thr Leu Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu
 145 150 155 160

Val Val Arg Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu
 165 170 175

Gln Glu Ser Leu Arg Ser Lys Glu Asp Ala His Lys Ser Glu Val Ala
 180 185 190

His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 195 200 205

Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 210 215 220

Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
 225 230 235 240

Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
 245 250 255

Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
 260 265 270
 Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
 275 280 285
 His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
 290 295 300
 Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
 305 310 315 320
 Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
 325 330 335
 Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
 340 345 350
 Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu
 355 360 365
 Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys
 370 375 380
 Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val
 385 390 395 400
 Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser
 405 410 415
 Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly
 420 425 430
 Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile
 435 440 445
 Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu
 450 455 460
 Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp
 465 470 475 480
 Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser
 485 490 495
 Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly
 500 505 510
 Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val
 515 520 525
 Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 530 535 540
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 545 550 555 560

Ala	Pro	Lys	Glu	Tyr	Glu	Ala	Tyr	Glu	Cys	Lys	Gly	Gly	Cys	Phe	Phe		
50						55					60						
Pro	Leu	Ala	Asp	Asp	Val	Thr	Pro	Thr	Lys	His	Ala	Ile	Val	Gln	Thr		
65					70					75					80		
Leu	Val	His	Leu	Lys	Phe	Pro	Thr	Lys	Val	Gly	Lys	Ala	Cys	Cys	Val		
				85					90					95			
Pro	Thr	Lys	Leu	Ser	Pro	Ile	Ser	Val	Leu	Tyr	Lys	Asp	Asp	Met	Gly		
			100					105					110				
Val	Pro	Thr	Leu	Lys	Tyr	His	Tyr	Glu	Gly	Met	Ser	Val	Ala	Glu	Cys		
			115				120					125					
Gly	Cys	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp		
130						135					140						
Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln		
145					150					155					160		
Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu		
				165					170					175			
Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn		
			180					185					190				
Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val		
		195					200					205					
Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys		
210						215					220						
Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn		
225					230					235					240		
Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr		
				245					250					255			
Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu		
			260					265					270				
Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe		
		275					280					285					
Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp		
290						295					300						
Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly		
305					310					315					320		
Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys		
				325					330					335			
Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln		
			340					345					350				

Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp
 355 360 365
 Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys
 370 375 380
 Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp
 385 390 395 400
 Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu
 405 410 415
 Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp
 420 425 430
 Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys
 435 440 445
 Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu
 450 455 460
 Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu
 465 470 475 480
 Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp
 485 490 495
 Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val
 500 505 510
 Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln
 515 520 525
 Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys
 530 535 540
 Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn
 545 550 555 560
 Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg
 565 570 575
 Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys
 580 585 590
 Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys
 595 600 605
 Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val
 610 615 620
 Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe
 625 630 635 640
 His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys
 645 650 655

Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys
660 665 670

Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys
675 680 685

Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys
690 695 700

Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
705 710 715

<210> 117
<211> 719
<212> PRT
<213> Homo sapiens

<400> 117

Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15

Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
20 25 30

His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
35 40 45

Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
50 55 60

Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
65 70 75 80

Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
85 90 95

Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
100 105 110

Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
115 120 125

His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
130 135 140

Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
145 150 155 160

Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
165 170 175

Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
180 185 190

Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	195	200	205
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	210	215	220
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	225	230	235
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	245	250	255
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	260	265	270
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	275	280	285
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	290	295	300
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	305	310	315
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	325	330	335
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	340	345	350
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	355	360	365
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	370	375	380
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	385	390	395
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	405	410	415
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	420	425	430
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	435	440	445
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	450	455	460
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	465	470	475
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	485	490	495

Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
 500 505 510
 Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Ser Ala Gly Ala Gly Ser His Cys Gln Lys Thr Ser Leu Arg Val
 610 615 620
 Asn Phe Glu Asp Ile Gly Trp Asp Ser Trp Ile Ile Ala Pro Lys Glu
 625 630 635 640
 Tyr Glu Ala Tyr Glu Cys Lys Gly Gly Cys Phe Phe Pro Leu Ala Asp
 645 650 655
 Asp Val Thr Pro Thr Lys His Ala Ile Val Gln Thr Leu Val His Leu
 660 665 670
 Lys Phe Pro Thr Lys Val Gly Lys Ala Cys Cys Val Pro Thr Lys Leu
 675 680 685
 Ser Pro Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val Pro Thr Leu
 690 695 700
 Lys Tyr His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly Cys Arg
 705 710 715

<210> 118

<211> 1016

<212> PRT

<213> Homo sapiens

<400> 118

Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Gly Val Phe Arg Arg Lys Pro Leu Gln Ser Trp Gly Arg
 20 25 30
 Gly Ser Ala Gly Gly Asn Ala His Ser Pro Leu Gly Val Pro Gly Gly
 35 40 45

Gly Leu Pro Glu His Thr Phe Asn Leu Lys Met Phe Leu Glu Asn Val
 50 55 60
 Lys Val Asp Phe Leu Arg Ser Leu Asn Leu Ser Gly Val Pro Ser Gln
 65 70 75 80
 Asp Lys Thr Arg Val Glu Pro Pro Gln Tyr Met Ile Asp Leu Tyr Asn
 85 90 95
 Arg Tyr Thr Ser Asp Lys Ser Thr Thr Pro Ala Ser Asn Ile Val Arg
 100 105 110
 Ser Phe Ser Met Glu Asp Ala Ile Ser Ile Thr Ala Thr Glu Asp Phe
 115 120 125
 Pro Phe Gln Lys His Ile Leu Leu Phe Asn Ile Ser Ile Pro Arg His
 130 135 140
 Glu Gln Ile Thr Arg Ala Glu Leu Arg Leu Tyr Val Ser Cys Gln Asn
 145 150 155 160
 His Val Asp Pro Ser His Asp Leu Lys Gly Ser Val Val Ile Tyr Asp
 165 170 175
 Val Leu Asp Gly Thr Asp Ala Trp Asp Ser Ala Thr Glu Thr Lys Thr
 180 185 190
 Phe Leu Val Ser Gln Asp Ile Gln Asp Glu Gly Trp Glu Thr Leu Glu
 195 200 205
 Val Ser Ser Ala Val Lys Arg Trp Val Arg Ser Asp Ser Thr Lys Ser
 210 215 220
 Lys Asn Lys Leu Glu Val Thr Val Glu Ser His Arg Lys Gly Cys Asp
 225 230 235 240
 Thr Leu Asp Ile Ser Val Pro Pro Gly Ser Arg Asn Leu Pro Phe Phe
 245 250 255
 Val Val Phe Ser Asn Asp His Ser Ser Gly Thr Lys Glu Thr Arg Leu
 260 265 270
 Glu Leu Arg Glu Met Ile Ser His Glu Gln Glu Ser Val Leu Lys Lys
 275 280 285
 Leu Ser Lys Asp Gly Ser Thr Glu Ala Gly Glu Ser Ser His Glu Glu
 290 295 300
 Asp Thr Asp Gly His Val Ala Ala Gly Ser Thr Leu Ala Arg Arg Lys
 305 310 315 320
 Arg Ser Ala Gly Ala Gly Ser His Cys Gln Lys Thr Ser Leu Arg Val
 325 330 335
 Asn Phe Glu Asp Ile Gly Trp Asp Ser Trp Ile Ile Ala Pro Lys Glu
 340 345 350

Tyr Glu Ala Tyr Glu Cys Lys Gly Gly Cys Phe Phe Pro Leu Ala Asp
 355 360 365
 Asp Val Thr Pro Thr Lys His Ala Ile Val Gln Thr Leu Val His Leu
 370 375 380
 Lys Phe Pro Thr Lys Val Gly Lys Ala Cys Cys Val Pro Thr Lys Leu
 385 390 395 400
 Ser Pro Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val Pro Thr Leu
 405 410 415
 Lys Tyr His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly Cys Arg Asp
 420 425 430
 Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu
 435 440 445
 Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln Gln
 450 455 460
 Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu Phe
 465 470 475 480
 Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys Ser
 485 490 495
 Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu Arg
 500 505 510
 Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro Glu
 515 520 525
 Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu Pro
 530 535 540
 Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His Asp
 545 550 555 560
 Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg Arg
 565 570 575
 His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg Tyr
 580 585 590
 Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala Cys
 595 600 605
 Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser Ser
 610 615 620
 Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu Arg
 625 630 635 640
 Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro Lys
 645 650 655

Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys Val
 660 665 670
 His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp Arg
 675 680 685
 Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser Ser
 690 695 700
 Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His Cys
 705 710 715 720
 Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser Leu
 725 730 735
 Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala Glu
 740 745 750
 Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg Arg
 755 760 765
 His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr Tyr
 770 775 780
 Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu Cys
 785 790 795 800
 Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro Gln
 805 810 815
 Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu Tyr
 820 825 830
 Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro Gln
 835 840 845
 Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys Val
 850 855 860
 Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys Ala
 865 870 875 880
 Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His Glu
 885 890 895
 Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu
 900 905 910
 Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr
 915 920 925
 Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile
 930 935 940
 Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu
 945 950 955 960

Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys
965 970 975
Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala
980 985 990
Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala
995 1000 1005
Ala Ser Gln Ala Ala Leu Gly Leu
1010 1015

<210> 119
<211> 1016
<212> PRT
<213> Homo sapiens

<400> 119
Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
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Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
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His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
35 40 45
Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
50 55 60
Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
65 70 75 80
Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
85 90 95
Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
100 105 110
Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
115 120 125
His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
130 135 140
Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
145 150 155 160
Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
165 170 175
Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
180 185 190

Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	195	200	205
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	210	215	220
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	225	230	235
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	245	250	255
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	260	265	270
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	275	280	285
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	290	295	300
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	305	310	315
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	325	330	335
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	340	345	350
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	355	360	365
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	370	375	380
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	385	390	395
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	405	410	415
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	420	425	430
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	435	440	445
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	450	455	460
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	465	470	475
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	485	490	495

Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe		
			500					505					510				
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala		
		515					520					525					
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu		
	530					535					540						
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys		
545					550					555					560		
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala		
				565					570					575			
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe		
			580					585					590				
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly		
		595					600					605					
Leu	Lys	Pro	Leu	Gln	Ser	Trp	Gly	Arg	Gly	Ser	Ala	Gly	Gly	Asn	Ala		
	610					615					620						
His	Ser	Pro	Leu	Gly	Val	Pro	Gly	Gly	Gly	Leu	Pro	Glu	His	Thr	Phe		
625					630					635					640		
Asn	Leu	Lys	Met	Phe	Leu	Glu	Asn	Val	Lys	Val	Asp	Phe	Leu	Arg	Ser		
				645					650					655			
Leu	Asn	Leu	Ser	Gly	Val	Pro	Ser	Gln	Asp	Lys	Thr	Arg	Val	Glu	Pro		
			660					665					670				
Pro	Gln	Tyr	Met	Ile	Asp	Leu	Tyr	Asn	Arg	Tyr	Thr	Ser	Asp	Lys	Ser		
		675					680						685				
Thr	Thr	Pro	Ala	Ser	Asn	Ile	Val	Arg	Ser	Phe	Ser	Met	Glu	Asp	Ala		
	690					695					700						
Ile	Ser	Ile	Thr	Ala	Thr	Glu	Asp	Phe	Pro	Phe	Gln	Lys	His	Ile	Leu		
705					710					715					720		
Leu	Phe	Asn	Ile	Ser	Ile	Pro	Arg	His	Glu	Gln	Ile	Thr	Arg	Ala	Glu		
				725					730					735			
Leu	Arg	Leu	Tyr	Val	Ser	Cys	Gln	Asn	His	Val	Asp	Pro	Ser	His	Asp		
			740					745					750				
Leu	Lys	Gly	Ser	Val	Val	Ile	Tyr	Asp	Val	Leu	Asp	Gly	Thr	Asp	Ala		
		755					760					765					
Trp	Asp	Ser	Ala	Thr	Glu	Thr	Lys	Thr	Phe	Leu	Val	Ser	Gln	Asp	Ile		
	770					775					780						
Gln	Asp	Glu	Gly	Trp	Glu	Thr	Leu	Glu	Val	Ser	Ser	Ala	Val	Lys	Arg		
785					790					795					800		

Trp Val Arg Ser Asp Ser Thr Lys Ser Lys Asn Lys Leu Glu Val Thr
 805 810 815
 Val Glu Ser His Arg Lys Gly Cys Asp Thr Leu Asp Ile Ser Val Pro
 820 825 830
 Pro Gly Ser Arg Asn Leu Pro Phe Phe Val Val Phe Ser Asn Asp His
 835 840 845
 Ser Ser Gly Thr Lys Glu Thr Arg Leu Glu Leu Arg Glu Met Ile Ser
 850 855 860
 His Glu Gln Glu Ser Val Leu Lys Lys Leu Ser Lys Asp Gly Ser Thr
 865 870 875 880
 Glu Ala Gly Glu Ser Ser His Glu Glu Asp Thr Asp Gly His Val Ala
 885 890 895
 Ala Gly Ser Thr Leu Ala Arg Arg Lys Arg Ser Ala Gly Ala Gly Ser
 900 905 910
 His Cys Gln Lys Thr Ser Leu Arg Val Asn Phe Glu Asp Ile Gly Trp
 915 920 925
 Asp Ser Trp Ile Ile Ala Pro Lys Glu Tyr Glu Ala Tyr Glu Cys Lys
 930 935 940
 Gly Gly Cys Phe Phe Pro Leu Ala Asp Asp Val Thr Pro Thr Lys His
 945 950 955 960
 Ala Ile Val Gln Thr Leu Val His Leu Lys Phe Pro Thr Lys Val Gly
 965 970 975
 Lys Ala Cys Cys Val Pro Thr Lys Leu Ser Pro Ile Ser Val Leu Tyr
 980 985 990
 Lys Asp Asp Met Gly Val Pro Thr Leu Lys Tyr His Tyr Glu Gly Met
 995 1000 1005
 Ser Val Ala Glu Cys Gly Cys Arg
 1010 1015

<210> 120
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 <212> PRT
 <213> Homo sapiens

<400> 120
 Met Arg Phe Pro Ser Ile Phe Thr Ala Val Leu Phe Ala Ala Ser Ser
 1 5 10 15
 Ala Leu Ala Ala Pro Val Asn Thr Thr Thr Glu Asp Glu Thr Ala Gln
 20 25 30
 Ile Pro Ala Glu Ala Val Ile Gly Tyr Ser Asp Leu Glu Gly Asp Phe

35					40					45					
Asp	Val	Ala	Val	Leu	Pro	Phe	Ser	Asn	Ser	Thr	Asn	Asn	Gly	Leu	Leu
50						55					60				
Phe	Ile	Asn	Thr	Thr	Ile	Ala	Ser	Ile	Ala	Ala	Lys	Glu	Glu	Gly	Val
65					70					75					80
Ser	Leu	Asp	Lys	Arg	Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser
				85					90					95	
Arg	Arg	Thr	Leu	Met	Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe
			100					105					110		
Ser	Cys	Leu	Lys	Asp	Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe
		115					120					125			
Gly	Asn	Gln	Phe	Gln	Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met
	130					135					140				
Ile	Gln	Gln	Ile	Phe	Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala
145					150					155					160
Trp	Asp	Glu	Thr	Leu	Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln
				165					170					175	
Leu	Asn	Asp	Leu	Glu	Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu
			180					185					190		
Thr	Pro	Leu	Met	Lys	Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe
		195					200					205			
Gln	Arg	Ile	Thr	Leu	Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala
	210					215					220				
Trp	Glu	Val	Val	Arg	Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr
225					230					235					240
Asn	Leu	Gln	Glu	Ser	Leu	Arg	Ser	Lys	Glu	Asp	Ala	His	Lys	Ser	Glu
				245					250					255	
Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu
			260					265					270		
Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp
		275					280					285			
His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val
		290				295					300				
Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe
305					310					315					320
Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu
				325					330					335	
Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe

340					345					350					
Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro
		355					360					365			
Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe
	370					375					380				
Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr
385					390					395					400
Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr
				405					410					415	
Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu
			420					425					430		
Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu
		435					440					445			
Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp
	450					455					460				
Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu
465					470					475					480
Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys
				485					490					495	
His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys
			500					505					510		
Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys
		515					520					525			
Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu
	530					535					540				
Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val
545					550					555					560
Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe
				565					570					575	
Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser
			580					585					590		
Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu
		595					600					605			
Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe
	610					615					620				
Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln
625					630					635					640
Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala

				645					650					655					
Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr				
			660					665					670						
Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys				
		675					680					685							
Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser				
		690				695					700								
Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser				
705					710					715					720				
Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro				
				725					730					735					
Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe				
			740					745					750						
Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu				
		755					760					765							
Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys				
		770				775						780							
His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp				
785					790					795					800				
Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr				
			805						810					815					
Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala				
			820					825					830						
Leu	Gly	Leu																	
		835																	

<210> 121
 <211> 716
 <212> PRT
 <213> Homo sapiens

<400> 121																			
Met	Lys	Val	Ser	Val	Ala	Ala	Leu	Ser	Cys	Leu	Met	Leu	Val	Thr	Ala				
1				5					10					15					
Leu	Gly	Ser	Gln	Ala	Ser	Ala	Gly	Ala	Gly	Ser	His	Cys	Gln	Lys	Thr				
			20					25					30						
Ser	Leu	Arg	Val	Asn	Phe	Glu	Asp	Ile	Gly	Trp	Asp	Ser	Trp	Ile	Ile				
		35					40					45							
Ala	Pro	Lys	Glu	Tyr	Glu	Ala	Tyr	Glu	Cys	Lys	Gly	Gly	Cys	Phe	Phe				
		50				55						60							

Pro	Leu	Ala	Asp	Asp	Val	Thr	Pro	Thr	Lys	His	Ala	Ile	Val	Gln	Thr		
65					70					75					80		
Leu	Val	His	Leu	Lys	Phe	Pro	Thr	Lys	Val	Gly	Lys	Ala	Cys	Cys	Val		
				85					90					95			
Pro	Thr	Lys	Leu	Ser	Pro	Ile	Ser	Val	Leu	Tyr	Lys	Asp	Asp	Met	Gly		
			100					105					110				
Val	Pro	Thr	Leu	Lys	Tyr	His	Tyr	Glu	Gly	Met	Ser	Val	Ala	Glu	Cys		
		115					120					125					
Gly	Cys	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp		
	130					135					140						
Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln		
145				150						155					160		
Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu		
				165					170					175			
Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn		
			180					185					190				
Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val		
		195					200					205					
Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys		
	210					215					220						
Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn		
225					230					235					240		
Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr		
				245					250					255			
Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu		
			260					265					270				
Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe		
		275					280					285					
Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp		
	290					295					300						
Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly		
305				310					315					320			
Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys		
				325					330					335			
Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln		
			340					345					350				
Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp		
		355					360					365					

Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys
 370 375 380
 Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp
 385 390 395 400
 Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu
 405 410 415
 Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp
 420 425 430
 Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys
 435 440 445
 Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu
 450 455 460
 Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu
 465 470 475 480
 Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp
 485 490 495
 Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val
 500 505 510
 Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln
 515 520 525
 Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys
 530 535 540
 Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn
 545 550 555 560
 Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg
 565 570 575
 Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys
 580 585 590
 Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys
 595 600 605
 Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val
 610 615 620
 Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe
 625 630 635 640
 His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys
 645 650 655
 Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys
 660 665 670

Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys
675 680 685

Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys
690 695 700

Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
705 710 715

<210> 122

<211> 1014

<212> PRT

<213> Homo sapiens

<400> 122

Met Cys Pro Gly Ala Leu Trp Val Ala Leu Pro Leu Leu Ser Leu Leu
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Ala Gly Ser Leu Gln Gly Lys Pro Leu Gln Ser Trp Gly Arg Gly Ser
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Ala Gly Gly Asn Ala His Ser Pro Leu Gly Val Pro Gly Gly Gly Leu
35 40 45

Pro Glu His Thr Phe Asn Leu Lys Met Phe Leu Glu Asn Val Lys Val
50 55 60

Asp Phe Leu Arg Ser Leu Asn Leu Ser Gly Val Pro Ser Gln Asp Lys
65 70 75 80

Thr Arg Val Glu Pro Pro Gln Tyr Met Ile Asp Leu Tyr Asn Arg Tyr
85 90 95

Thr Ser Asp Lys Ser Thr Thr Pro Ala Ser Asn Ile Val Arg Ser Phe
100 105 110

Ser Met Glu Asp Ala Ile Ser Ile Thr Ala Thr Glu Asp Phe Pro Phe
115 120 125

Gln Lys His Ile Leu Leu Phe Asn Ile Ser Ile Pro Arg His Glu Gln
130 135 140

Ile Thr Arg Ala Glu Leu Arg Leu Tyr Val Ser Cys Gln Asn His Val
145 150 155 160

Asp Pro Ser His Asp Leu Lys Gly Ser Val Val Ile Tyr Asp Val Leu
165 170 175

Asp Gly Thr Asp Ala Trp Asp Ser Ala Thr Glu Thr Lys Thr Phe Leu
180 185 190

Val Ser Gln Asp Ile Gln Asp Glu Gly Trp Glu Thr Leu Glu Val Ser
195 200 205

Ser	Ala	Val	Lys	Arg	Trp	Val	Arg	Ser	Asp	Ser	Thr	Lys	Ser	Lys	Asn	210	215	220
Lys	Leu	Glu	Val	Thr	Val	Glu	Ser	His	Arg	Lys	Gly	Cys	Asp	Thr	Leu	225	230	235
Asp	Ile	Ser	Val	Pro	Pro	Gly	Ser	Arg	Asn	Leu	Pro	Phe	Phe	Val	Val	245	250	255
Phe	Ser	Asn	Asp	His	Ser	Ser	Gly	Thr	Lys	Glu	Thr	Arg	Leu	Glu	Leu	260	265	270
Arg	Glu	Met	Ile	Ser	His	Glu	Gln	Glu	Ser	Val	Leu	Lys	Lys	Leu	Ser	275	280	285
Lys	Asp	Gly	Ser	Thr	Glu	Ala	Gly	Glu	Ser	Ser	His	Glu	Glu	Asp	Thr	290	295	300
Asp	Gly	His	Val	Ala	Ala	Gly	Ser	Thr	Leu	Ala	Arg	Arg	Lys	Arg	Ser	305	310	315
Ala	Gly	Ala	Gly	Ser	His	Cys	Gln	Lys	Thr	Ser	Leu	Arg	Val	Asn	Phe	325	330	335
Glu	Asp	Ile	Gly	Trp	Asp	Ser	Trp	Ile	Ile	Ala	Pro	Lys	Glu	Tyr	Glu	340	345	350
Ala	Tyr	Glu	Cys	Lys	Gly	Gly	Cys	Phe	Phe	Pro	Leu	Ala	Asp	Asp	Val	355	360	365
Thr	Pro	Thr	Lys	His	Ala	Ile	Val	Gln	Thr	Leu	Val	His	Leu	Lys	Phe	370	375	380
Pro	Thr	Lys	Val	Gly	Lys	Ala	Cys	Cys	Val	Pro	Thr	Lys	Leu	Ser	Pro	385	390	395
Ile	Ser	Val	Leu	Tyr	Lys	Asp	Asp	Met	Gly	Val	Pro	Thr	Leu	Lys	Tyr	405	410	415
His	Tyr	Glu	Gly	Met	Ser	Val	Ala	Glu	Cys	Gly	Cys	Arg	Asp	Ala	His	420	425	430
Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	435	440	445
Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	450	455	460
Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	465	470	475
Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	485	490	495
Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	500	505	510

Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn		
		515					520					525					
Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu		
	530					535					540						
Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu		
545					550					555					560		
Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro		
			565						570					575			
Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala		
			580					585					590				
Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu		
	595						600					605					
Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys		
	610					615					620						
Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe		
625					630					635					640		
Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu		
			645						650					655			
Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr		
		660						665					670				
Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp		
	675					680						685					
Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu		
	690					695					700						
Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala		
705					710					715					720		
Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala		
			725						730					735			
Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys		
		740						745					750				
Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro		
	755						760					765					
Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr		
	770					775					780						
Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala		
785					790					795					800		
Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu		
			805						810					815			

50					55					60					
Asp	Phe	Leu	Arg	Ser	Leu	Asn	Leu	Ser	Gly	Val	Pro	Ser	Gln	Asp	Lys
65					70					75					80
Thr	Arg	Val	Glu	Pro	Pro	Gln	Tyr	Met	Ile	Asp	Leu	Tyr	Asn	Arg	Tyr
				85					90					95	
Thr	Ser	Asp	Lys	Ser	Thr	Thr	Pro	Ala	Ser	Asn	Ile	Val	Arg	Ser	Phe
			100					105					110		
Ser	Met	Glu	Asp	Ala	Ile	Ser	Ile	Thr	Ala	Thr	Glu	Asp	Phe	Pro	Phe
			115				120					125			
Gln	Lys	His	Ile	Leu	Leu	Phe	Asn	Ile	Ser	Ile	Pro	Arg	His	Glu	Gln
	130					135					140				
Ile	Thr	Arg	Ala	Glu	Leu	Arg	Leu	Tyr	Val	Ser	Cys	Gln	Asn	His	Val
145					150					155					160
Asp	Pro	Ser	His	Asp	Leu	Lys	Gly	Ser	Val	Val	Ile	Tyr	Asp	Val	Leu
				165					170					175	
Asp	Gly	Thr	Asp	Ala	Trp	Asp	Ser	Ala	Thr	Glu	Thr	Lys	Thr	Phe	Leu
			180					185						190	
Val	Ser	Gln	Asp	Ile	Gln	Asp	Glu	Gly	Trp	Glu	Thr	Leu	Glu	Val	Ser
			195				200					205			
Ser	Ala	Val	Lys	Arg	Trp	Val	Arg	Ser	Asp	Ser	Thr	Lys	Ser	Lys	Asn
	210					215					220				
Lys	Leu	Glu	Val	Thr	Val	Glu	Ser	His	Arg	Lys	Gly	Cys	Asp	Thr	Leu
225					230					235					240
Asp	Ile	Ser	Val	Pro	Pro	Gly	Ser	Arg	Asn	Leu	Pro	Phe	Phe	Val	Val
				245					250					255	
Phe	Ser	Asn	Asp	His	Ser	Ser	Gly	Thr	Lys	Glu	Thr	Arg	Leu	Glu	Leu
			260					265					270		
Arg	Glu	Met	Ile	Ser	His	Glu	Gln	Glu	Ser	Val	Leu	Lys	Lys	Leu	Ser
			275				280					285			
Lys	Asp	Gly	Ser	Thr	Glu	Ala	Gly	Glu	Ser	Ser	His	Glu	Glu	Asp	Thr
			290			295					300				
Asp	Gly	His	Val	Ala	Ala	Gly	Ser	Thr	Leu	Ala	Arg	Arg	Lys	Arg	Ser
305					310					315					320
Ala	Gly	Ala	Gly	Ser	His	Cys	Gln	Lys	Thr	Ser	Leu	Arg	Val	Asn	Phe
				325					330					335	
Glu	Asp	Ile	Gly	Trp	Asp	Ser	Trp	Ile	Ile	Ala	Pro	Lys	Glu	Tyr	Glu
			340					345					350		
Ala	Tyr	Glu	Cys	Lys	Gly	Gly	Cys	Phe	Phe	Pro	Leu	Ala	Asp	Asp	Val

355					360					365					
Thr	Pro	Thr	Lys	His	Ala	Ile	Val	Gln	Thr	Leu	Val	His	Leu	Lys	Phe
	370					375					380				
Pro	Thr	Lys	Val	Gly	Lys	Ala	Cys	Cys	Val	Pro	Thr	Lys	Leu	Ser	Pro
385					390					395					400
Ile	Ser	Val	Leu	Tyr	Lys	Asp	Asp	Met	Gly	Val	Pro	Thr	Leu	Lys	Tyr
				405					410					415	
His	Tyr	Glu	Gly	Met	Ser	Val	Ala	Glu	Cys	Gly	Cys	Arg	Asp	Ala	His
			420					425					430		
Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe
		435					440					445			
Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro
	450					455					460				
Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys
465					470					475					480
Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His
				485					490					495	
Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr
			500					505					510		
Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn
		515					520					525			
Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu
	530					535					540				
Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu
545					550					555					560
Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro
				565					570					575	
Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala
			580					585					590		
Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu
		595					600					605			
Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys
	610					615					620				
Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe
625					630					635					640
Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu
				645					650					655	
Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr

660					665					670					
Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp
		675					680					685			
Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu
	690					695					700				
Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala
705					710					715					720
Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala
				725					730					735	
Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys
			740					745					750		
Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro
		755					760					765			
Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr
	770					775					780				
Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala
785					790					795					800
Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu
				805					810					815	
Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe
			820					825					830		
Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser
		835					840					845			
Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser
	850					855					860				
Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp
865					870					875					880
Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr
				885					890					895	
Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn
			900					905					910		
Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro
		915					920					925			
Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr
	930					935					940				
Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu
945					950					955					960
Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val

				965						970						975
Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	
			980					985					990			
Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	
		995					1000					1005				
Gln	Ala		Ala	Leu	Gly	Leu										
		1010														

<210> 124
 <211> 774
 <212> PRT
 <213> Homo sapiens

<400> 124																
Met	Lys	Trp	Val	Thr	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala	
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Tyr	Ser	Arg	Gly	Val	Phe	Arg	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	
			20					25					30			
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	
		35					40					45				
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	
	50					55					60					
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	
	65				70					75					80	
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	
				85					90					95		
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	
			100					105					110			
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	
		115					120					125				
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	
	130					135					140					
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	
	145				150					155					160	
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	
				165					170					175		
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	
			180					185					190			
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	
		195					200					205				

Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	210	215	220
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	225	230	235
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	245	250	255
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	260	265	270
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	275	280	285
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	290	295	300
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	305	310	315
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	325	330	335
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	340	345	350
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	355	360	365
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	370	375	380
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	385	390	395
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	405	410	415
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	420	425	430
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	435	440	445
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	450	455	460
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	465	470	475
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	485	490	495
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	500	505	510

Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu
 610 615 620
 Met Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys
 625 630 635 640
 Asp Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe
 645 650 655
 Gln Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile
 660 665 670
 Phe Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr
 675 680 685
 Leu Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu
 690 695 700
 Glu Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met
 705 710 715 720
 Lys Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr
 725 730 735
 Leu Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val
 740 745 750
 Arg Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu
 755 760 765
 Ser Leu Arg Ser Lys Glu
 770

<210> 125

<211> 773

<212> PRT

<213> Homo sapiens

<400> 125

Met	Ala	Leu	Thr	Phe	Ala	Leu	Leu	Val	Ala	Leu	Leu	Val	Leu	Ser	Cys
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Lys	Ser	Ser	Cys	Ser	Val	Gly	Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu
			20					25					30		
Gly	Ser	Arg	Arg	Thr	Leu	Met	Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser
		35					40					45			
Leu	Phe	Ser	Cys	Leu	Lys	Asp	Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu
	50					55					60				
Glu	Phe	Gly	Asn	Gln	Phe	Gln	Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His
	65				70					75					80
Glu	Met	Ile	Gln	Gln	Ile	Phe	Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser
				85					90					95	
Ala	Ala	Trp	Asp	Glu	Thr	Leu	Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr
			100					105					110		
Gln	Gln	Leu	Asn	Asp	Leu	Glu	Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val
		115					120					125			
Thr	Glu	Thr	Pro	Leu	Met	Lys	Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys
	130					135					140				
Tyr	Phe	Gln	Arg	Ile	Thr	Leu	Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro
145					150					155					160
Cys	Ala	Trp	Glu	Val	Val	Arg	Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu
				165					170					175	
Ser	Thr	Asn	Leu	Gln	Glu	Ser	Leu	Arg	Ser	Lys	Glu	Asp	Ala	His	Lys
			180					185					190		
Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys
		195					200					205			
Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe
	210					215					220				
Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr
225					230					235					240
Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr
				245					250					255	
Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr
			260					265					270		
Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu
		275					280					285			
Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val

290					295					300					
Arg 305	Pro	Glu	Val	Asp	Val 310	Met	Cys	Thr	Ala	Phe 315	His	Asp	Asn	Glu	Glu 320
Thr	Phe	Leu	Lys	Lys 325	Tyr	Leu	Tyr	Glu	Ile 330	Ala	Arg	Arg	His	Pro 335	Tyr
Phe	Tyr	Ala	Pro 340	Glu	Leu	Leu	Phe	Phe 345	Ala	Lys	Arg	Tyr	Lys 350	Ala	Ala
Phe	Thr	Glu	Cys	Cys 355	Gln	Ala	Ala	Asp 360	Lys	Ala	Ala	Cys 365	Leu	Leu	Pro
Lys 370	Leu	Asp	Glu	Leu	Arg	Asp 375	Glu	Gly	Lys	Ala	Ser 380	Ser	Ala	Lys	Gln
Arg 385	Leu	Lys	Cys	Ala	Ser 390	Leu	Gln	Lys	Phe	Gly 395	Glu	Arg	Ala	Phe	Lys 400
Ala	Trp	Ala	Val	Ala 405	Arg	Leu	Ser	Gln	Arg 410	Phe	Pro	Lys	Ala	Glu 415	Phe
Ala	Glu	Val	Ser 420	Lys	Leu	Val	Thr	Asp 425	Leu	Thr	Lys	Val	His 430	Thr	Glu
Cys	Cys	His 435	Gly	Asp	Leu	Leu	Glu	Cys 440	Ala	Asp	Asp	Arg 445	Ala	Asp	Leu
Ala 450	Lys	Tyr	Ile	Cys	Glu	Asn 455	Gln	Asp	Ser	Ile 460	Ser	Ser	Lys	Leu	Lys
Glu 465	Cys	Cys	Glu	Lys	Pro 470	Leu	Leu	Glu	Lys	Ser 475	His	Cys	Ile	Ala	Glu 480
Val	Glu	Asn	Asp	Glu 485	Met	Pro	Ala	Asp	Leu 490	Pro	Ser	Leu	Ala	Ala	Asp 495
Phe	Val	Glu	Ser 500	Lys	Asp	Val	Cys	Lys 505	Asn	Tyr	Ala	Glu	Ala 510	Lys	Asp
Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu 520	Tyr	Ala	Arg	Arg 525	His	Pro	Asp
Tyr 530	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu 535	Ala	Lys	Thr 540	Tyr	Glu	Thr	Thr
Leu 545	Glu	Lys	Cys	Cys	Ala 550	Ala	Ala	Asp	Pro	His 555	Glu	Cys	Tyr	Ala	Lys 560
Val	Phe	Asp	Glu	Phe 565	Lys	Pro	Leu	Val 570	Glu	Glu	Pro	Gln	Asn	Leu 575	Ile
Lys	Gln	Asn	Cys 580	Glu	Leu	Phe	Glu	Gln 585	Leu	Gly	Glu	Tyr	Lys 590	Phe	Gln
Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr

595					600					605					
Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys
610						615					620				
Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr
625					630					635					640
Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro
				645					650					655	
Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg
			660						665					670	
Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys
		675					680					685			
Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu
	690					695					700				
Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu
705					710					715					720
Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met
				725					730						735
Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys
			740					745					750		
Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln
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Ala	Ala	Leu	Gly	Leu											
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<211> 908

<212> PRT

<213> Homo sapiens

<400> 126

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			20					25					30		
Cys	Tyr	Ser	Cys	Val	Gln	Lys	Ala	Asp	Asp	Gly	Cys	Ser	Pro	Asn	Lys
		35					40					45			
Met	Lys	Thr	Val	Lys	Cys	Ala	Pro	Gly	Val	Asp	Val	Cys	Thr	Glu	Ala
	50					55					60				
Val	Gly	Ala	Val	Glu	Thr	Ile	His	Gly	Gln	Phe	Ser	Leu	Ala	Val	Arg
65					70					75					80

Gly	Cys	Gly	Ser	Gly	Leu	Pro	Gly	Lys	Asn	Asp	Arg	Gly	Leu	Asp	Leu	85	90	95
His	Gly	Leu	Leu	Ala	Phe	Ile	Gln	Leu	Gln	Gln	Cys	Ala	Gln	Asp	Arg	100	105	110
Cys	Asn	Ala	Lys	Leu	Asn	Leu	Thr	Ser	Arg	Ala	Leu	Asp	Pro	Ala	Gly	115	120	125
Asn	Glu	Ser	Ala	Tyr	Pro	Pro	Asn	Gly	Val	Glu	Cys	Tyr	Ser	Cys	Val	130	135	140
Gly	Leu	Ser	Arg	Glu	Ala	Cys	Gln	Gly	Thr	Ser	Pro	Pro	Val	Val	Ser	145	150	155
Cys	Tyr	Asn	Ala	Ser	Asp	His	Val	Tyr	Lys	Gly	Cys	Phe	Asp	Gly	Asn	165	170	175
Val	Thr	Leu	Thr	Ala	Ala	Asn	Val	Thr	Val	Ser	Leu	Pro	Val	Arg	Gly	180	185	190
Cys	Val	Gln	Asp	Glu	Phe	Cys	Thr	Arg	Asp	Gly	Val	Thr	Gly	Pro	Gly	195	200	205
Phe	Thr	Leu	Ser	Gly	Ser	Cys	Cys	Gln	Gly	Ser	Arg	Cys	Asn	Ser	Asp	210	215	220
Leu	Arg	Asn	Lys	Thr	Tyr	Phe	Ser	Pro	Arg	Ile	Pro	Pro	Leu	Val	Arg	225	230	235
Leu	Pro	Pro	Pro	Glu	Pro	Thr	Thr	Val	Ala	Ser	Thr	Thr	Ser	Val	Thr	245	250	255
Thr	Ser	Thr	Ser	Ala	Pro	Val	Arg	Pro	Thr	Ser	Thr	Thr	Lys	Pro	Met	260	265	270
Pro	Ala	Pro	Thr	Ser	Gln	Thr	Pro	Arg	Gln	Gly	Val	Glu	His	Glu	Ala	275	280	285
Ser	Arg	Asp	Glu	Glu	Pro	Arg	Leu	Thr	Gly	Gly	Ala	Ala	Gly	His	Gln	290	295	300
Asp	Arg	Ser	Asn	Ser	Gly	Gln	Tyr	Pro	Ala	Lys	Gly	Gly	Pro	Gln	Gln	305	310	315
Pro	His	Asn	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	325	330	335
Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	340	345	350
Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	355	360	365
Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	370	375	380

Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	385	390	395	400
Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	405	410	415	
Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	420	425	430	
Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	435	440	445	
Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	450	455	460	
Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	465	470	475	480
Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	485	490	495	
Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	500	505	510	
Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	515	520	525	
Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	530	535	540	
Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	545	550	555	560
Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	565	570	575	
Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	580	585	590	
Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	595	600	605	
Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	610	615	620	
Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	625	630	635	640
Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	645	650	655	
Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	660	665	670	
Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	675	680	685	

Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val
 690 695 700
 Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln
 705 710 715 720
 Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys
 725 730 735
 Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn
 740 745 750
 Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg
 755 760 765
 Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys
 770 775 780
 Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys
 785 790 795 800
 Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val
 805 810 815
 Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe
 820 825 830
 His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys
 835 840 845
 Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys
 850 855 860
 Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys
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 Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
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 <213> Homo sapiens

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	50					55					60				
Val	Gly	Ala	Val	Glu	Thr	Ile	His	Gly	Gln	Phe	Ser	Leu	Ala	Val	Arg
65					70					75					80
Gly	Cys	Gly	Ser	Gly	Leu	Pro	Gly	Lys	Asn	Asp	Arg	Gly	Leu	Asp	Leu
				85					90					95	
His	Gly	Leu	Leu	Ala	Phe	Ile	Gln	Leu	Gln	Gln	Cys	Ala	Gln	Asp	Arg
			100					105					110		
Cys	Asn	Ala	Lys	Leu	Asn	Leu	Thr	Ser	Arg	Ala	Leu	Asp	Pro	Ala	Gly
		115					120					125			
Asn	Glu	Ser	Ala	Tyr	Pro	Pro	Asn	Gly	Val	Glu	Cys	Tyr	Ser	Cys	Val
	130					135					140				
Gly	Leu	Ser	Arg	Glu	Ala	Cys	Gln	Gly	Thr	Ser	Pro	Pro	Val	Val	Ser
145					150					155					160
Cys	Tyr	Asn	Ala	Ser	Asp	His	Val	Tyr	Lys	Gly	Cys	Phe	Asp	Gly	Asn
				165					170					175	
Val	Thr	Leu	Thr	Ala	Ala	Asn	Val	Thr	Val	Ser	Leu	Pro	Val	Arg	Gly
			180					185					190		
Cys	Val	Gln	Asp	Glu	Phe	Cys	Thr	Arg	Asp	Gly	Val	Thr	Gly	Pro	Gly
		195					200					205			
Phe	Thr	Leu	Ser	Gly	Ser	Cys	Cys	Gln	Gly	Ser	Arg	Cys	Asn	Ser	Asp
	210					215					220				
Leu	Arg	Asn	Lys	Thr	Tyr	Phe	Ser	Pro	Arg	Ile	Pro	Pro	Leu	Val	Arg
225					230					235					240
Leu	Pro	Pro	Pro	Glu	Pro	Thr	Thr	Val	Ala	Ser	Thr	Thr	Ser	Val	Thr
				245					250					255	
Thr	Ser	Thr	Ser	Ala	Pro	Val	Arg	Pro	Thr	Ser	Thr	Thr	Lys	Pro	Met
			260					265					270		
Pro	Ala	Pro	Thr	Ser	Gln	Thr	Pro	Arg	Gln	Gly	Val	Glu	His	Glu	Ala
		275					280					285			
Ser	Arg	Asp	Glu	Glu	Pro	Arg	Leu	Thr	Gly	Gly	Ala	Ala	Gly	His	Gln
	290					295					300				
Asp	Arg	Ser	Asn	Ser	Gly	Gln	Tyr	Pro	Ala	Lys	Gly	Gly	Pro	Gln	Gln
305					310					315				320	
Pro	His	Asn	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp
				325					330					335	
Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln

340						345						350					
Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu		
		355					360					365					
Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn		
	370					375					380						
Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val		
385					390					395					400		
Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys		
				405					410					415			
Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn		
			420					425					430				
Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr		
		435					440					445					
Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu		
	450					455					460						
Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe		
465					470					475					480		
Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp		
				485					490					495			
Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly		
			500					505					510				
Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys		
		515					520						525				
Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln		
	530					535					540						
Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp		
545					550					555					560		
Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys		
				565					570					575			
Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp		
			580					585					590				
Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu		
		595					600					605					
Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp		
	610					615					620						
Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys		
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Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu		

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			20					25					30		
Thr	Leu	Met	Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys
		35					40					45			
Leu	Lys	Asp	Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn
	50					55					60				
Gln	Phe	Gln	Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln
65					70					75					80
Gln	Ile	Phe	Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp
			85						90					95	
Glu	Thr	Leu	Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn
		100						105				110			
Asp	Leu	Glu	Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro
	115						120					125			
Leu	Met	Lys	Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg
	130					135					140				
Ile	Thr	Leu	Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu
145					150					155					160
Val	Val	Arg	Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu
				165					170					175	
Gln	Glu	Ser	Leu	Arg	Ser	Lys	Glu	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			180					185					190		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
	195						200					205			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	210					215					220				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
225					230					235				240	
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				245					250					255	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			260					265					270		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
	275						280					285			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	290					295					300				

Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	305	310	315	320
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	325	330	335	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	340	345	350	
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	355	360	365	
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	370	375	380	
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	385	390	395	400
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	405	410	415	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	420	425	430	
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	435	440	445	
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	450	455	460	
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	465	470	475	480
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	485	490	495	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	500	505	510	
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	515	520	525	
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	530	535	540	
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	545	550	555	560
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	565	570	575	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	580	585	590	
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	595	600	605	

Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
 610 615 620
 Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
 625 630 635 640
 Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
 645 650 655
 Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
 660 665 670
 Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 675 680 685
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 690 695 700
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 705 710 715 720
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 725 730 735
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 740 745 750
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 755 760 765

Leu

<210> 129
 <211> 639
 <212> PRT
 <213> Homo sapiens

<400> 129
 Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Ser Leu Asp Lys Arg His Ala Glu Gly Thr Phe Thr Ser
 20 25 30
 Asp Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala
 35 40 45
 Trp Leu Val Lys Gly Arg Asp Ala His Lys Ser Glu Val Ala His Arg
 50 55 60
 Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala
 65 70 75 80
 Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu
 85 90 95

Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	100	105	110
Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	115	120	125
Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	130	135	140
Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	145	150	155
Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	165	170	175
Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	180	185	190
Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	195	200	205
Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	210	215	220
Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	225	230	235
Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	245	250	255
Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	260	265	270
Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	275	280	285
Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	290	295	300
Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	305	310	315
Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	325	330	335
Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	340	345	350
Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	355	360	365
Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	370	375	380
Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	385	390	395

Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala
 405 410 415
 Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys
 420 425 430
 Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu
 435 440 445
 Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg
 450 455 460
 Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val
 465 470 475 480
 Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu
 485 490 495
 Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn
 500 505 510
 Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr
 515 520 525
 Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala
 530 535 540
 Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr
 545 550 555 560
 Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln
 565 570 575
 Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys
 580 585 590
 Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe
 595 600 605
 Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu
 610 615 620
 Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 625 630 635

<210> 130

<211> 639

<212> PRT

<213> Homo sapiens

<400> 130

Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15

Tyr Ser Arg Ser Leu Asp Lys Arg Asp Ala His Lys Ser Glu Val Ala

20					25					30					
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
	65				70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
	145				150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
	225				230					235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245					250					255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly
			260					265					270		
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile
		275					280					285			
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu
	290					295					300				
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp
	305				310					315					320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser

325					330					335					
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly
			340					345					350		
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val
		355					360					365			
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys
		370				375						380			
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu
385					390					395					400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys
				405					410					415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu
			420					425					430		
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val
		435					440					445			
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His
	450					455					460				
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val
465					470					475					480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg
				485					490					495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe
			500					505					510		
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala
		515					520					525			
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu
		530				535					540				
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys
545					550					555					560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala
				565					570					575	
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe
			580					585					590		
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly
		595					600					605			
Leu	His	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val	Ser	Ser	Tyr	Leu	Glu
	610					615					620				
Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala	Trp	Leu	Val	Lys	Gly	Arg	

625

630

635

<210> 131

<211> 639

<212> PRT

<213> Homo sapiens

<400> 131

Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15

Tyr Ser Arg Ser Leu Asp Lys Arg His Gly Glu Gly Thr Phe Thr Ser
 20 25 30

Asp Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala
 35 40 45

Trp Leu Val Lys Gly Arg Asp Ala His Lys Ser Glu Val Ala His Arg
 50 55 60

Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala
 65 70 75 80

Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu
 85 90 95

Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser
 100 105 110

Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu
 115 120 125

Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys
 130 135 140

Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys
 145 150 155 160

Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val
 165 170 175

Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr
 180 185 190

Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu
 195 200 205

Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln
 210 215 220

Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg
 225 230 235 240

Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser
 245 250 255

Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val Ala Arg
 260 265 270
 Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu
 275 280 285
 Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu
 290 295 300
 Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu
 305 310 315 320
 Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro
 325 330 335
 Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met
 340 345 350
 Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp
 355 360 365
 Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe
 370 375 380
 Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu
 385 390 395 400
 Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala
 405 410 415
 Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys
 420 425 430
 Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu
 435 440 445
 Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg
 450 455 460
 Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val
 465 470 475 480
 Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu
 485 490 495
 Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn
 500 505 510
 Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr
 515 520 525
 Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala
 530 535 540
 Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr
 545 550 555 560

Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	180	185	190
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	195	200	205
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	210	215	220
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	225	230	235
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	245	250	255
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	260	265	270
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	275	280	285
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	290	295	300
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	305	310	315
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	325	330	335
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	340	345	350
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	355	360	365
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	370	375	380
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	385	390	395
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	405	410	415
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	420	425	430
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	435	440	445
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	450	455	460
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	465	470	475
																480		

Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
 485 490 495
 Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
 500 505 510
 Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu
 610 615 620
 Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg
 625 630 635

<210> 133
 <211> 648
 <212> PRT
 <213> Homo sapiens

<400> 133
 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30
 His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45
 Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60
 Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
 65 70 75 80
 Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
 85 90 95
 Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala

100					105					110					
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
145					150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
225					230					235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245					250					255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly
			260					265					270		
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile
		275					280					285			
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu
	290					295					300				
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp
305					310					315					320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser
				325					330					335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly
			340					345					350		
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val
		355					360					365			
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys
	370					375					380				
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu
385					390					395					400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys

405					410					415					
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu
			420					425					430		
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val
		435					440					445			
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His
	450					455					460				
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val
465					470					475					480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg
				485					490					495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe
			500					505					510		
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala
		515					520					525			
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu
	530					535					540				
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys
545					550					555					560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala
				565					570					575	
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe
			580					585					590		
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly
		595				600						605			
Leu	His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu
	610					615					620				
Glu	Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro
625					630					635					640
Ser	Ser	Gly	Ala	Pro	Pro	Pro	Ser								
				645											

<210> 134
 <211> 648
 <212> PRT
 <213> Homo sapiens

<400> 134
 Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15

Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	
			20					25					30			
Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu	Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	
		35					40					45				
Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser	Ser	Gly	Ala	Pro	Pro	Pro	Ser	Asp	
	50					55					60					
Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	
	65				70					75					80	
Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	
				85					90					95		
Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	
			100					105					110			
Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	
		115					120					125				
Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	
	130					135					140					
Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	
	145				150					155					160	
Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	
				165					170					175		
Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	
			180					185					190			
Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	
		195					200					205				
His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	
	210					215					220					
Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	
	225				230					235					240	
Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	
				245					250					255		
Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	
			260					265					270			
Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	
		275					280					285				
Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	
	290					295					300					
His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	
	305				310					315					320	

Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	
				325					330					335		
Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	
			340					345					350			
Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	
		355					360					365				
Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	
	370					375					380					
Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	
385					390					395					400	
His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	
				405					410					415		
Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	
			420					425					430			
Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	
	435						440					445				
Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	
	450					455					460					
Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	
465					470					475					480	
Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	
				485					490					495		
Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	
			500					505					510			
Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	
		515					520					525				
Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	
	530					535					540					
Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	
545					550					555					560	
Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	
				565					570					575		
Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	
			580					585					590			
Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	
		595					600					605				
Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	
	610					615					620					

Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala
 625 630 635 640

Ala Ser Gln Ala Ala Leu Gly Leu
 645

<210> 135
 <211> 1018
 <212> PRT
 <213> Homo sapiens

<400> 135
 Met Cys Pro Gly Ala Leu Trp Val Ala Leu Pro Leu Leu Ser Leu Leu
 1 5 10 15

Ala Gly Ser Leu Gln Gly Lys Pro Leu Gln Ser Trp Gly Arg Gly Ser
 20 25 30

Ala Gly Gly Asn Ala His Ser Pro Leu Gly Val Pro Gly Gly Gly Leu
 35 40 45

Pro Glu His Thr Phe Asn Leu Lys Met Phe Leu Glu Asn Val Lys Val
 50 55 60

Asp Phe Leu Arg Ser Leu Asn Leu Ser Gly Val Pro Ser Gln Asp Lys
 65 70 75 80

Thr Arg Val Glu Pro Pro Gln Tyr Met Ile Asp Leu Tyr Asn Arg Tyr
 85 90 95

Thr Ser Asp Lys Ser Thr Thr Pro Ala Ser Asn Ile Val Arg Ser Phe
 100 105 110

Ser Met Glu Asp Ala Ile Ser Ile Thr Ala Thr Glu Asp Phe Pro Phe
 115 120 125

Gln Lys His Ile Leu Leu Phe Asn Ile Ser Ile Pro Arg His Glu Gln
 130 135 140

Ile Thr Arg Ala Glu Leu Arg Leu Tyr Val Ser Cys Gln Asn His Val
 145 150 155 160

Asp Pro Ser His Asp Leu Lys Gly Ser Val Val Ile Tyr Asp Val Leu
 165 170 175

Asp Gly Thr Asp Ala Trp Asp Ser Ala Thr Glu Thr Lys Thr Phe Leu
 180 185 190

Val Ser Gln Asp Ile Gln Asp Glu Gly Trp Glu Thr Leu Glu Val Ser
 195 200 205

Ser Ala Val Lys Arg Trp Val Arg Ser Asp Ser Thr Lys Ser Lys Asn
 210 215 220

Lys	Leu	Glu	Val	Thr	Val	Glu	Ser	His	Arg	Lys	Gly	Cys	Asp	Thr	Leu	225	230	235	240
Asp	Ile	Ser	Val	Pro	Pro	Gly	Ser	Arg	Asn	Leu	Pro	Phe	Phe	Val	Val	245	250	255	
Phe	Ser	Asn	Asp	His	Ser	Ser	Gly	Thr	Lys	Glu	Thr	Arg	Leu	Glu	Leu	260	265	270	
Arg	Glu	Met	Ile	Ser	His	Glu	Gln	Glu	Ser	Val	Leu	Lys	Lys	Leu	Ser	275	280	285	
Lys	Asp	Gly	Ser	Thr	Glu	Ala	Gly	Glu	Ser	Ser	His	Glu	Glu	Asp	Thr	290	295	300	
Asp	Gly	His	Val	Ala	Ala	Gly	Ser	Thr	Leu	Ala	Arg	Arg	Lys	Arg	Leu	305	310	315	320
Glu	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	325	330	335	
Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	340	345	350	
Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	355	360	365	
Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	370	375	380	
Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	385	390	395	400
Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	405	410	415	
Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	420	425	430	
Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	435	440	445	
His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	450	455	460	
Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	465	470	475	480
Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	485	490	495	
Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	500	505	510	
Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	515	520	525	

Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	530	535	540
Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	545	550	555
Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	565	570	575
Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	580	585	590
Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	595	600	605
His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	610	615	620
Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	625	630	635
Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	645	650	655
Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	660	665	670
Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	675	680	685
Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	690	695	700
Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	705	710	715
Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	725	730	735
Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	740	745	750
Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	755	760	765
Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	770	775	780
His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	785	790	795
Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	805	810	815
Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	820	825	830

Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr
 835 840 845
 Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln
 850 855 860
 Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys
 865 870 875 880
 Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu
 885 890 895
 Val Ala Ala Ser Gln Ala Ala Leu Gly Leu Leu Glu Ser Ala Gly Ala
 900 905 910
 Gly Ser His Cys Gln Lys Thr Ser Leu Arg Val Asn Phe Glu Asp Ile
 915 920 925
 Gly Trp Asp Ser Trp Ile Ile Ala Pro Lys Glu Tyr Glu Ala Tyr Glu
 930 935 940
 Cys Lys Gly Gly Cys Phe Phe Pro Leu Ala Asp Asp Val Thr Pro Thr
 945 950 955 960
 Lys His Ala Ile Val Gln Thr Leu Val His Leu Lys Phe Pro Thr Lys
 965 970 975
 Val Gly Lys Ala Cys Cys Val Pro Thr Lys Leu Ser Pro Ile Ser Val
 980 985 990
 Leu Tyr Lys Asp Asp Met Gly Val Pro Thr Leu Lys Tyr His Tyr Glu
 995 1000 1005
 Gly Met Ser Val Ala Glu Cys Gly Cys Arg
 1010 1015

<210> 136
 <211> 726
 <212> PRT
 <213> Homo sapiens

<400> 136
 Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Ser Leu Asp Lys Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30
 His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45
 Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60
 Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp

65	70					75					80				
Glu Ser Ala Glu	Asn Cys Asp Lys Ser Leu	His Thr Leu Phe Gly Asp	85	90	95										
Lys Leu Cys Thr	Val Ala Thr Leu Arg Glu Thr Tyr Gly	Glu Met Ala	100	105	110										
Asp Cys Cys Ala	Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln		115	120	125										
His Lys Asp Asp	Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val		130	135	140										
Asp Val Met Cys Thr	Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys		145	150	155										
Lys Tyr Leu Tyr	Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro		165	170	175										
Glu Leu Leu Phe	Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys		180	185	190										
Cys Gln Ala Ala	Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu		195	200	205										
Leu Arg Asp Glu Gly	Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys		210	215	220										
Ala Ser Leu Gln Lys	Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val		225	230	235										
Ala Arg Leu Ser	Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser		245	250	255										
Lys Leu Val Thr	Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly		260	265	270										
Asp Leu Leu Glu Cys	Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile		275	280	285										
Cys Glu Asn Gln Asp	Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu		290	295	300										
Lys Pro Leu Leu Glu	Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp		305	310	315										
Glu Met Pro Ala Asp	Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser		325	330	335										
Lys Asp Val Cys	Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly		340	345	350										
Met Phe Leu Tyr	Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val		355	360	365										
Leu Leu Leu Arg	Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys														

370					375					380					
Cys 385	Ala	Ala	Ala	Asp	Pro 390	His	Glu	Cys	Tyr	Ala 395	Lys	Val	Phe	Asp	Glu 400
Phe	Lys	Pro	Leu	Val 405	Glu	Glu	Pro	Gln	Asn 410	Leu	Ile	Lys	Gln	Asn	Cys 415
Glu	Leu	Phe	Glu 420	Gln	Leu	Gly	Glu	Tyr 425	Lys	Phe	Gln	Asn	Ala 430	Leu	Leu
Val	Arg	Tyr 435	Thr	Lys	Lys	Val	Pro 440	Gln	Val	Ser	Thr	Pro 445	Thr	Leu	Val
Glu	Val 450	Ser	Arg	Asn	Leu	Gly 455	Lys	Val	Gly	Ser	Lys 460	Cys	Cys	Lys	His
Pro 465	Glu	Ala	Lys	Arg	Met 470	Pro	Cys	Ala	Glu	Asp 475	Tyr	Leu	Ser	Val	Val 480
Leu	Asn	Gln	Leu	Cys 485	Val	Leu	His	Glu	Lys 490	Thr	Pro	Val	Ser	Asp	Arg 495
Val	Thr	Lys	Cys 500	Cys	Thr	Glu	Ser	Leu 505	Val	Asn	Arg	Arg	Pro 510	Cys	Phe
Ser	Ala	Leu 515	Glu	Val	Asp	Glu	Thr 520	Tyr	Val	Pro	Lys	Glu 525	Phe	Asn	Ala
Glu 530	Thr	Phe	Thr	Phe	His	Ala 535	Asp	Ile	Cys	Thr	Leu 540	Ser	Glu	Lys	Glu
Arg 545	Gln	Ile	Lys	Lys	Gln 550	Thr	Ala	Leu	Val	Glu 555	Leu	Val	Lys	His	Lys 560
Pro	Lys	Ala	Thr	Lys 565	Glu	Gln	Leu	Lys	Ala 570	Val	Met	Asp	Asp	Phe	Ala 575
Ala	Phe	Val	Glu 580	Lys	Cys	Cys	Lys	Ala 585	Asp	Asp	Lys	Glu 590	Thr	Cys	Phe
Ala	Glu	Glu 595	Gly	Lys	Lys	Leu	Val 600	Ala	Ala	Ser	Gln	Ala 605	Ala	Leu	Gly
Leu 610	Ala	Arg	Pro	Thr	Pro	Pro 615	Thr	Cys	Tyr	Ser	Arg 620	Met	Arg	Ala	Leu
Ser 625	Gln	Glu	Ile	Thr	Arg	Asp 630	Phe	Asn	Leu	Leu 635	Gln	Val	Ser	Glu	Pro 640
Ser	Glu	Pro	Cys	Val 645	Arg	Tyr	Leu	Pro	Arg 650	Leu	Tyr	Leu	Asp	Ile	His 655
Asn	Tyr	Cys	Val 660	Leu	Asp	Lys	Leu	Arg 665	Asp	Phe	Val	Ala	Ser	Pro	Pro 670
Cys	Trp	Lys	Val	Ala	Gln	Val	Asp	Ser	Leu	Lys	Asp	Lys	Ala	Arg	Lys

675	680	685
Leu Tyr Thr Ile Met Asn Ser Phe Cys Arg Arg Asp Leu Val Phe Leu		
690	695	700
Leu Asp Asp Cys Asn Ala Leu Glu Tyr Pro Ile Pro Val Thr Thr Val		
705	710	715
Leu Pro Asp Arg Gln Arg		
725		

<210> 137
 <211> 726
 <212> PRT
 <213> Homo sapiens

<400> 137
Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15
Tyr Ser Arg Ser Leu Asp Lys Arg Ala Arg Pro Thr Pro Pro Thr Cys
20 25 30
Tyr Ser Arg Met Arg Ala Leu Ser Gln Glu Ile Thr Arg Asp Phe Asn
35 40 45
Leu Leu Gln Val Ser Glu Pro Ser Glu Pro Cys Val Arg Tyr Leu Pro
50 55 60
Arg Leu Tyr Leu Asp Ile His Asn Tyr Cys Val Leu Asp Lys Leu Arg
65 70 75 80
Asp Phe Val Ala Ser Pro Pro Cys Trp Lys Val Ala Gln Val Asp Ser
85 90 95
Leu Lys Asp Lys Ala Arg Lys Leu Tyr Thr Ile Met Asn Ser Phe Cys
100 105 110
Arg Arg Asp Leu Val Phe Leu Leu Asp Asp Cys Asn Ala Leu Glu Tyr
115 120 125
Pro Ile Pro Val Thr Thr Val Leu Pro Asp Arg Gln Arg Asp Ala His
130 135 140
Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe
145 150 155 160
Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro
165 170 175
Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys
180 185 190
Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His
195 200 205

Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	210	215	220	
Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	225	230	235	240
Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	245	250	255	
Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	260	265	270	
Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	275	280	285	
Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	290	295	300	
Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	305	310	315	320
Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	325	330	335	
Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	340	345	350	
Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	355	360	365	
Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	370	375	380	
Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	385	390	395	400
Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	405	410	415	
Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	420	425	430	
Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	435	440	445	
Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	450	455	460	
Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	465	470	475	480
Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	485	490	495	
Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	500	505	510	

Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu
 515 520 525
 Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe
 530 535 540
 Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser
 545 550 555 560
 Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser
 565 570 575
 Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp
 580 585 590
 Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr
 595 600 605
 Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn
 610 615 620
 Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro
 625 630 635 640
 Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr
 645 650 655
 Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu
 660 665 670
 Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val
 675 680 685
 Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp
 690 695 700
 Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser
 705 710 715 720
 Gln Ala Ala Leu Gly Leu
 725

<210> 138

<211> 771

<212> PRT

<213> Homo sapiens

<400> 138

Met Thr Asn Lys Cys Leu Leu Gln Ile Ala Leu Leu Leu Cys Phe Ser
 1 5 10 15
 Thr Thr Ala Leu Ser Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser
 20 25 30
 Ser Asn Phe Gln Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu

35					40					45					
Glu	Tyr	Cys	Leu	Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile
	50					55					60				
Lys	Gln	Leu	Gln	Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr
	65					70					75				80
Glu	Met	Leu	Gln	Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser
				85					90					95	
Thr	Gly	Trp	Asn	Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr
			100					105					110		
His	Gln	Ile	Asn	His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys
		115					120					125			
Glu	Asp	Phe	Thr	Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg
	130					135					140				
Tyr	Tyr	Gly	Arg	Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His
	145					150					155				160
Cys	Ala	Trp	Thr	Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe
				165					170					175	
Ile	Asn	Arg	Leu	Thr	Gly	Tyr	Leu	Arg	Asn	Asp	Ala	His	Lys	Ser	Glu
			180					185					190		
Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu
		195					200					205			
Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp
	210					215					220				
His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val
	225					230					235				240
Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe
				245					250					255	
Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu
			260					265					270		
Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe
		275					280					285			
Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro
	290					295					300				
Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe
	305					310					315				320
Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr
				325					330					335	
Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr

340					345					350					
Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu
		355					360					365			
Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu
	370					375					380				
Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp
385					390					395					400
Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu
			405						410					415	
Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys
			420					425					430		
His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys
		435					440					445			
Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys
	450					455					460				
Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu
465					470					475					480
Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val
			485					490						495	
Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe
			500					505					510		
Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser
		515					520					525			
Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu
	530					535					540				
Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe
545					550					555					560
Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln
				565					570					575	
Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala
			580					585					590		
Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr
		595					600					605			
Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys
	610					615					620				
Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser
625					630					635					640
Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser

				645					650					655					
Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro				
			660					665					670						
Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe				
		675					680					685							
Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu				
		690				695					700								
Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys				
705					710					715					720				
His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp				
				725					730					735					
Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr				
			740					745					750						
Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala				
		755					760					765							
Leu	Gly	Leu																	
		770																	

<210> 139
 <211> 271
 <212> PRT
 <213> Homo sapiens

<400> 139																			
Val	Ala	Glu	Thr	Pro	Thr	Tyr	Pro	Trp	Arg	Asp	Ala	Glu	Thr	Gly	Glu				
1				5				10						15					
Arg	Leu	Val	Cys	Ala	Gln	Cys	Pro	Pro	Gly	Thr	Phe	Val	Gln	Arg	Pro				
			20				25						30						
Cys	Arg	Arg	Asp	Ser	Pro	Thr	Thr	Cys	Gly	Pro	Cys	Pro	Pro	Arg	His				
		35				40					45								
Tyr	Thr	Gln	Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	Tyr	Cys	Asn	Val				
		50				55					60								
Leu	Cys	Gly	Glu	Arg	Glu	Glu	Glu	Ala	Arg	Ala	Cys	His	Ala	Thr	His				
65					70					75					80				
Asn	Arg	Ala	Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	His	Ala	Gly	Phe				
				85					90					95					
Cys	Leu	Glu	His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	Val	Ile	Ala	Pro				
			100				105						110						
Gly	Thr	Pro	Ser	Gln	Asn	Thr	Gln	Cys	Gln	Pro	Cys	Pro	Pro	Gly	Thr				
		115					120					125							

Phe	Ser	Ala	Ser	Ser	Ser	Ser	Ser	Glu	Gln	Cys	Gln	Pro	His	Arg	Asn
130						135					140				
Cys	Thr	Ala	Leu	Gly	Leu	Ala	Leu	Asn	Val	Pro	Gly	Ser	Ser	Ser	His
145					150					155					160
Asp	Thr	Leu	Cys	Thr	Ser	Cys	Thr	Gly	Phe	Pro	Leu	Ser	Thr	Arg	Val
				165					170					175	
Pro	Gly	Ala	Glu	Glu	Cys	Glu	Arg	Ala	Val	Ile	Asp	Phe	Val	Ala	Phe
			180					185					190		
Gln	Asp	Ile	Ser	Ile	Lys	Arg	Leu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu
		195					200					205			
Ala	Pro	Glu	Gly	Trp	Gly	Pro	Thr	Pro	Arg	Ala	Gly	Arg	Ala	Ala	Leu
	210					215					220				
Gln	Leu	Lys	Leu	Arg	Arg	Arg	Leu	Thr	Glu	Leu	Leu	Gly	Ala	Gln	Asp
225					230					235					240
Gly	Ala	Leu	Leu	Val	Arg	Leu	Leu	Gln	Ala	Leu	Arg	Val	Ala	Arg	Met
				245				250						255	
Pro	Gly	Leu	Glu	Arg	Ser	Val	Arg	Glu	Arg	Phe	Leu	Pro	Val	His	
			260					265					270		

<210> 140
 <211> 271
 <212> PRT
 <213> Homo sapiens

<400> 140															
Val	Ala	Glu	Thr	Pro	Thr	Tyr	Pro	Trp	Arg	Asp	Ala	Glu	Thr	Gly	Glu
1				5				10						15	
Arg	Leu	Val	Cys	Ala	Gln	Cys	Pro	Pro	Gly	Thr	Phe	Val	Gln	Arg	Pro
			20				25						30		
Cys	Arg	Arg	Asp	Ser	Pro	Thr	Thr	Cys	Gly	Pro	Cys	Pro	Pro	Arg	His
		35					40					45			
Tyr	Thr	Gln	Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	Tyr	Cys	Asn	Val
	50					55					60				
Leu	Cys	Gly	Glu	Arg	Glu	Glu	Glu	Ala	Arg	Ala	Cys	His	Ala	Thr	His
65					70					75					80
Asn	Arg	Ala	Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	His	Ala	Gly	Phe
				85					90					95	
Cys	Leu	Glu	His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	Val	Ile	Ala	Pro
			100				105						110		
Gly	Thr	Pro	Ser	Gln	Asn	Thr	Gln	Cys	Gln	Pro	Cys	Pro	Pro	Gly	Thr
		115					120					125			

Phe Ser Ala Ser Ser Ser Ser Ser Glu Gln Cys Gln Pro His Arg Asn
 130 135 140
 Cys Thr Ala Leu Gly Leu Ala Leu Asn Val Pro Gly Ser Ser Ser His
 145 150 155 160
 Asp Thr Leu Cys Thr Ser Cys Thr Gly Phe Pro Leu Ser Thr Arg Val
 165 170 175
 Pro Gly Ala Glu Glu Cys Glu Arg Ala Val Ile Asp Phe Val Ala Phe
 180 185 190
 Gln Asp Ile Ser Ile Lys Arg Leu Gln Arg Leu Leu Gln Ala Leu Glu
 195 200 205
 Ala Pro Glu Gly Trp Gly Pro Thr Pro Arg Ala Gly Arg Ala Ala Leu
 210 215 220
 Gln Leu Lys Leu Arg Arg Arg Leu Thr Glu Leu Leu Gly Ala Gln Asp
 225 230 235 240
 Gly Ala Leu Leu Val Arg Leu Leu Gln Ala Leu Arg Val Ala Arg Met
 245 250 255
 Pro Gly Leu Glu Arg Ser Val Arg Glu Arg Phe Leu Pro Val His
 260 265 270

<210> 141
 <211> 271
 <212> PRT
 <213> Homo sapiens

<400> 141
 Val Ala Glu Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly Glu
 1 5 10 15
 Arg Leu Val Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg Pro
 20 25 30
 Cys Arg Arg Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg His
 35 40 45
 Tyr Thr Gln Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn Val
 50 55 60
 Leu Cys Gly Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr His
 65 70 75 80
 Asn Arg Ala Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly Phe
 85 90 95
 Cys Leu Glu His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala Pro
 100 105 110

Gly Thr Pro Ser Gln Asn Thr Gln Cys Gln Pro Cys Pro Pro Gly Thr
 115 120 125
 Phe Ser Ala Ser Ser Ser Ser Ser Glu Gln Cys Gln Pro His Arg Asn
 130 135 140
 Cys Thr Ala Leu Gly Leu Ala Leu Asn Val Pro Gly Ser Ser Ser His
 145 150 155 160
 Asp Thr Leu Cys Thr Ser Cys Thr Gly Phe Pro Leu Ser Thr Arg Val
 165 170 175
 Pro Gly Ala Glu Glu Cys Glu Arg Ala Val Ile Asp Phe Val Ala Phe
 180 185 190
 Gln Asp Ile Ser Ile Lys Arg Leu Gln Arg Leu Leu Gln Ala Leu Glu
 195 200 205
 Ala Pro Glu Gly Trp Gly Pro Thr Pro Arg Ala Gly Arg Ala Ala Leu
 210 215 220
 Gln Leu Lys Leu Arg Arg Arg Leu Thr Glu Leu Leu Gly Ala Gln Asp
 225 230 235 240
 Gly Ala Leu Leu Val Arg Leu Leu Gln Ala Leu Arg Val Ala Arg Met
 245 250 255
 Pro Gly Leu Glu Arg Ser Val Arg Glu Arg Phe Leu Pro Val His
 260 265 270

<210> 142
 <211> 271
 <212> PRT
 <213> Homo sapiens

<400> 142
 Val Ala Glu Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly Glu
 1 5 10 15
 Arg Leu Val Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg Pro
 20 25 30
 Cys Arg Arg Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg His
 35 40 45
 Tyr Thr Gln Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn Val
 50 55 60
 Leu Cys Gly Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr His
 65 70 75 80
 Asn Arg Ala Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly Phe
 85 90 95

Cys Leu Glu His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala Pro
 100 105 110
 Gly Thr Pro Ser Gln Asn Thr Gln Cys Gln Pro Cys Pro Pro Gly Thr
 115 120 125
 Phe Ser Ala Ser Ser Ser Ser Ser Glu Gln Cys Gln Pro His Arg Asn
 130 135 140
 Cys Thr Ala Leu Gly Leu Ala Leu Asn Val Pro Gly Ser Ser Ser His
 145 150 155 160
 Asp Thr Leu Cys Thr Ser Cys Thr Gly Phe Pro Leu Ser Thr Arg Val
 165 170 175
 Pro Gly Ala Glu Glu Cys Glu Arg Ala Val Ile Asp Phe Val Ala Phe
 180 185 190
 Gln Asp Ile Ser Ile Lys Arg Leu Gln Arg Leu Leu Gln Ala Leu Glu
 195 200 205
 Ala Pro Glu Gly Trp Gly Pro Thr Pro Arg Ala Gly Arg Ala Ala Leu
 210 215 220
 Gln Leu Lys Leu Arg Arg Arg Leu Thr Glu Leu Leu Gly Ala Gln Asp
 225 230 235 240
 Gly Ala Leu Leu Val Arg Leu Leu Gln Ala Leu Arg Val Ala Arg Met
 245 250 255
 Pro Gly Leu Glu Arg Ser Val Arg Glu Arg Phe Leu Pro Val His
 260 265 270
 <210> 143
 <211> 271
 <212> PRT
 <213> Homo sapiens
 <400> 143
 Val Ala Glu Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly Glu
 1 5 10 15
 Arg Leu Val Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg Pro
 20 25 30
 Cys Arg Arg Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg His
 35 40 45
 Tyr Thr Gln Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn Val
 50 55 60
 Leu Cys Gly Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr His
 65 70 75 80
 Asn Arg Ala Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly Phe
 85 90 95

Cys Leu Glu His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala Pro
 100 105 110
 Gly Thr Pro Ser Gln Asn Thr Gln Cys Gln Pro Cys Pro Pro Gly Thr
 115 120 125
 Phe Ser Ala Ser Ser Ser Ser Ser Glu Gln Cys Gln Pro His Arg Asn
 130 135 140
 Cys Thr Ala Leu Gly Leu Ala Leu Asn Val Pro Gly Ser Ser Ser His
 145 150 155 160
 Asp Thr Leu Cys Thr Ser Cys Thr Gly Phe Pro Leu Ser Thr Arg Val
 165 170 175
 Pro Gly Ala Glu Glu Cys Glu Arg Ala Val Ile Asp Phe Val Ala Phe
 180 185 190
 Gln Asp Ile Ser Ile Lys Arg Leu Gln Arg Leu Leu Gln Ala Leu Glu
 195 200 205
 Ala Pro Glu Gly Trp Gly Pro Thr Pro Arg Ala Gly Arg Ala Ala Leu
 210 215 220
 Gln Leu Lys Leu Arg Arg Arg Leu Thr Glu Leu Leu Gly Ala Gln Asp
 225 230 235 240
 Gly Ala Leu Leu Val Arg Leu Leu Gln Ala Leu Arg Val Ala Arg Met
 245 250 255
 Pro Gly Leu Glu Arg Ser Val Arg Glu Arg Phe Leu Pro Val His
 260 265 270

<210> 144
 <211> 271
 <212> PRT
 <213> Homo sapiens

<400> 144
 Val Ala Glu Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly Glu
 1 5 10 15
 Arg Leu Val Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg Pro
 20 25 30
 Cys Arg Arg Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg His
 35 40 45
 Tyr Thr Gln Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn Val
 50 55 60
 Leu Cys Gly Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr His
 65 70 75 80
 Asn Arg Ala Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly Phe

Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn Val Leu Cys Gly
85 90 95
Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr His Asn Arg Ala
100 105 110
Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly Phe Cys Leu Glu
115 120 125
His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala Pro Gly Thr Pro
130 135 140
Ser Gln Asn Thr Gln Cys Gln Pro Cys Pro Pro Gly Thr Phe Ser Ala
145 150 155 160
Ser Ser Ser Ser Ser Glu Gln Cys Gln Pro His Arg Asn Cys Thr Ala
165 170 175
Leu Gly Leu Ala Leu Asn Val Pro Gly Ser Ser Ser His Asp Thr Leu
180 185 190
Cys Thr Ser Cys Thr Gly Phe Pro Leu Ser Thr Arg Val Pro Gly Ala
195 200 205
Glu Glu Cys Glu Arg Ala Val Ile Asp Phe Val Ala Phe Gln Asp Ile
210 215 220
Ser Ile Lys Arg Leu Gln Arg Leu Leu Gln Ala Leu Glu Ala Pro Glu
225 230 235 240
Gly Trp Gly Pro Thr Pro Arg Ala Gly Arg Ala Ala Leu Gln Leu Lys
245 250 255
Leu Arg Arg Arg Leu Thr Glu Leu Leu Gly Ala Gln Asp Gly Ala Leu
260 265 270
Leu Val Arg Leu Leu Gln Ala Leu Arg Val Ala Arg Met Pro Gly Leu
275 280 285
Glu Arg Ser Val Arg Glu Arg Phe Leu Pro Val His
290 295 300

<210> 146

<211> 271

<212> PRT

<213> Homo sapiens

<400> 146

Val Ala Glu Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly Glu
1 5 10 15
Arg Leu Val Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg Pro
20 25 30
Cys Arg Arg Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg His

35					40					45					
Tyr	Thr	Gln	Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	Tyr	Cys	Asn	Val
	50					55					60				
Leu	Cys	Gly	Glu	Arg	Glu	Glu	Glu	Ala	Arg	Ala	Cys	His	Ala	Thr	His
	65					70					75				80
Asn	Arg	Ala	Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	His	Ala	Gly	Phe
				85					90					95	
Cys	Leu	Glu	His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	Val	Ile	Ala	Pro
			100					105					110		
Gly	Thr	Pro	Ser	Gln	Asn	Thr	Gln	Cys	Gln	Pro	Cys	Pro	Pro	Gly	Thr
		115					120					125			
Phe	Ser	Ala	Ser	Ser	Ser	Ser	Ser	Glu	Gln	Cys	Gln	Pro	His	Arg	Asn
	130					135					140				
Cys	Thr	Ala	Leu	Gly	Leu	Ala	Leu	Asn	Val	Pro	Gly	Ser	Ser	Ser	His
	145					150					155				160
Asp	Thr	Leu	Cys	Thr	Ser	Cys	Thr	Gly	Phe	Pro	Leu	Ser	Thr	Arg	Val
				165					170					175	
Pro	Gly	Ala	Glu	Glu	Cys	Glu	Arg	Ala	Val	Ile	Asp	Phe	Val	Ala	Phe
			180					185					190		
Gln	Asp	Ile	Ser	Ile	Lys	Arg	Leu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu
	195						200					205			
Ala	Pro	Glu	Gly	Trp	Gly	Pro	Thr	Pro	Arg	Ala	Gly	Arg	Ala	Ala	Leu
	210					215					220				
Gln	Leu	Lys	Leu	Arg	Arg	Arg	Leu	Thr	Glu	Leu	Leu	Gly	Ala	Gln	Asp
	225					230					235				240
Gly	Ala	Leu	Leu	Val	Arg	Leu	Leu	Gln	Ala	Leu	Arg	Val	Ala	Arg	Met
				245					250					255	
Pro	Gly	Leu	Glu	Arg	Ser	Val	Arg	Glu	Arg	Phe	Leu	Pro	Val	His	
			260					265					270		

<210> 147

<211> 271

<212> PRT

<213> Homo sapiens

<400> 147

Val	Ala	Glu	Thr	Pro	Thr	Tyr	Pro	Trp	Arg	Asp	Ala	Glu	Thr	Gly	Glu
	1				5				10					15	
Arg	Leu	Val	Cys	Ala	Gln	Cys	Pro	Pro	Gly	Thr	Phe	Val	Gln	Arg	Pro
			20					25					30		

20					25					30					
Cys	Arg	Arg	Asp	Ser	Pro	Thr	Thr	Cys	Gly	Pro	Cys	Pro	Pro	Arg	His
		35					40					45			
Tyr	Thr	Gln	Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	Tyr	Cys	Asn	Val
	50					55					60				
Leu	Cys	Gly	Glu	Arg	Glu	Glu	Glu	Ala	Arg	Ala	Cys	His	Ala	Thr	His
65					70					75					80
Asn	Arg	Ala	Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	His	Ala	Gly	Phe
				85					90					95	
Cys	Leu	Glu	His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	Val	Ile	Ala	Pro
			100					105					110		
Gly	Thr	Pro	Ser	Gln	Asn	Thr	Gln	Cys	Gln	Pro	Cys	Pro	Pro	Gly	Thr
		115					120					125			
Phe	Ser	Ala	Ser	Ser	Ser	Ser	Ser	Glu	Gln	Cys	Gln	Pro	His	Arg	Asn
	130						135				140				
Cys	Thr	Ala	Leu	Gly	Leu	Ala	Leu	Asn	Val	Pro	Gly	Ser	Ser	Ser	His
145					150					155					160
Asp	Thr	Leu	Cys	Thr	Ser	Cys	Thr	Gly	Phe	Pro	Leu	Ser	Thr	Arg	Val
				165					170					175	
Pro	Gly	Ala	Glu	Glu	Cys	Glu	Arg	Ala	Val	Ile	Asp	Phe	Val	Ala	Phe
			180					185					190		
Gln	Asp	Ile	Ser	Ile	Lys	Arg	Leu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu
		195					200					205			
Ala	Pro	Glu	Gly	Trp	Gly	Pro	Thr	Pro	Arg	Ala	Gly	Arg	Ala	Ala	Leu
	210					215					220				
Gln	Leu	Lys	Leu	Arg	Arg	Arg	Leu	Thr	Glu	Leu	Leu	Gly	Ala	Gln	Asp
225					230					235					240
Gly	Ala	Leu	Leu	Val	Arg	Leu	Leu	Gln	Ala	Leu	Arg	Val	Ala	Arg	Met
				245				250						255	
Pro	Gly	Leu	Glu	Arg	Ser	Val	Arg	Glu	Arg	Phe	Leu	Pro	Val	His	
			260					265					270		

<210> 149

<211> 271

<212> PRT

<213> Homo sapiens

<400> 149

Val	Ala	Glu	Thr	Pro	Thr	Tyr	Pro	Trp	Arg	Asp	Ala	Glu	Thr	Gly	Glu
1				5					10					15	

Arg	Leu	Val	Cys	Ala	Gln	Cys	Pro	Pro	Gly	Thr	Phe	Val	Gln	Arg	Pro			
			20					25					30					
Cys	Arg	Arg	Asp	Ser	Pro	Thr	Thr	Cys	Gly	Pro	Cys	Pro	Pro	Arg	His			
		35					40					45						
Tyr	Thr	Gln	Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	Tyr	Cys	Asn	Val			
	50					55					60							
Leu	Cys	Gly	Glu	Arg	Glu	Glu	Glu	Ala	Arg	Ala	Cys	His	Ala	Thr	His			
	65				70					75					80			
Asn	Arg	Ala	Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	His	Ala	Gly	Phe			
				85					90					95				
Cys	Leu	Glu	His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	Val	Ile	Ala	Pro			
			100					105					110					
Gly	Thr	Pro	Ser	Gln	Asn	Thr	Gln	Cys	Gln	Pro	Cys	Pro	Pro	Gly	Thr			
		115					120					125						
Phe	Ser	Ala	Ser	Ser	Ser	Ser	Ser	Glu	Gln	Cys	Gln	Pro	His	Arg	Asn			
	130					135					140							
Cys	Thr	Ala	Leu	Gly	Leu	Ala	Leu	Asn	Val	Pro	Gly	Ser	Ser	Ser	His			
	145				150					155					160			
Asp	Thr	Leu	Cys	Thr	Ser	Cys	Thr	Gly	Phe	Pro	Leu	Ser	Thr	Arg	Val			
				165					170					175				
Pro	Gly	Ala	Glu	Glu	Cys	Glu	Arg	Ala	Val	Ile	Asp	Phe	Val	Ala	Phe			
			180					185					190					
Gln	Asp	Ile	Ser	Ile	Lys	Arg	Leu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu			
		195					200					205						
Ala	Pro	Glu	Gly	Trp	Gly	Pro	Thr	Pro	Arg	Ala	Gly	Arg	Ala	Ala	Leu			
	210					215					220							
Gln	Leu	Lys	Leu	Arg	Arg	Arg	Leu	Thr	Glu	Leu	Leu	Gly	Ala	Gln	Asp			
	225				230					235				240				
Gly	Ala	Leu	Leu	Val	Arg	Leu	Leu	Gln	Ala	Leu	Arg	Val	Ala	Arg	Met			
				245				250						255				
Pro	Gly	Leu	Glu	Arg	Ser	Val	Arg	Glu	Arg	Phe	Leu	Pro	Val	His				
			260					265					270					

<210> 150
 <211> 271
 <212> PRT
 <213> Homo sapiens

<400> 150

Val	Ala	Glu	Thr	Pro	Thr	Tyr	Pro	Trp	Arg	Asp	Ala	Glu	Thr	Gly	Glu	1	5	10	15
Arg	Leu	Val	Cys	Ala	Gln	Cys	Pro	Pro	Gly	Thr	Phe	Val	Gln	Arg	Pro	20	25	30	
Cys	Arg	Arg	Asp	Ser	Pro	Thr	Thr	Cys	Gly	Pro	Cys	Pro	Pro	Arg	His	35	40	45	
Tyr	Thr	Gln	Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	Tyr	Cys	Asn	Val	50	55	60	
Leu	Cys	Gly	Glu	Arg	Glu	Glu	Glu	Ala	Arg	Ala	Cys	His	Ala	Thr	His	65	70	75	80
Asn	Arg	Ala	Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	His	Ala	Gly	Phe	85	90	95	
Cys	Leu	Glu	His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	Val	Ile	Ala	Pro	100	105	110	
Gly	Thr	Pro	Ser	Gln	Asn	Thr	Gln	Cys	Gln	Pro	Cys	Pro	Pro	Gly	Thr	115	120	125	
Phe	Ser	Ala	Ser	Ser	Ser	Ser	Ser	Glu	Gln	Cys	Gln	Pro	His	Arg	Asn	130	135	140	
Cys	Thr	Ala	Leu	Gly	Leu	Ala	Leu	Asn	Val	Pro	Gly	Ser	Ser	Ser	His	145	150	155	160
Asp	Thr	Leu	Cys	Thr	Ser	Cys	Thr	Gly	Phe	Pro	Leu	Ser	Thr	Arg	Val	165	170	175	
Pro	Gly	Ala	Glu	Glu	Cys	Glu	Arg	Ala	Val	Ile	Asp	Phe	Val	Ala	Phe	180	185	190	
Gln	Asp	Ile	Ser	Ile	Lys	Arg	Leu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu	195	200	205	
Ala	Pro	Glu	Gly	Trp	Gly	Pro	Thr	Pro	Arg	Ala	Gly	Arg	Ala	Ala	Leu	210	215	220	
Gln	Leu	Lys	Leu	Arg	Arg	Arg	Leu	Thr	Glu	Leu	Leu	Gly	Ala	Gln	Asp	225	230	235	240
Gly	Ala	Leu	Leu	Val	Arg	Leu	Leu	Gln	Ala	Leu	Arg	Val	Ala	Arg	Met	245	250	255	
Pro	Gly	Leu	Glu	Arg	Ser	Val	Arg	Glu	Arg	Phe	Leu	Pro	Val	His		260	265	270	

<210> 151
 <211> 300
 <212> PRT

<213> Homo sapiens

<400> 151

Met	Arg	Ala	Leu	Glu	Gly	Pro	Gly	Leu	Ser	Leu	Leu	Cys	Leu	Val	Leu	
1				5					10					15		
Ala	Leu	Pro	Ala	Leu	Leu	Pro	Val	Pro	Ala	Val	Arg	Gly	Val	Ala	Glu	
			20					25					30			
Thr	Pro	Thr	Tyr	Pro	Trp	Arg	Asp	Ala	Glu	Thr	Gly	Glu	Arg	Leu	Val	
		35					40					45				
Cys	Ala	Gln	Cys	Pro	Pro	Gly	Thr	Phe	Val	Gln	Arg	Pro	Cys	Arg	Arg	
	50					55					60					
Asp	Ser	Pro	Thr	Thr	Cys	Gly	Pro	Cys	Pro	Pro	Arg	His	Tyr	Thr	Gln	
65					70					75					80	
Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	Tyr	Cys	Asn	Val	Leu	Cys	Gly	
				85					90					95		
Glu	Arg	Glu	Glu	Glu	Ala	Arg	Ala	Cys	His	Ala	Thr	His	Asn	Arg	Ala	
			100					105					110			
Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	His	Ala	Gly	Phe	Cys	Leu	Glu	
		115					120					125				
His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	Val	Ile	Ala	Pro	Gly	Thr	Pro	
	130					135					140					
Ser	Gln	Asn	Thr	Gln	Cys	Gln	Pro	Cys	Pro	Pro	Gly	Thr	Phe	Ser	Ala	
145					150					155					160	
Ser	Ser	Ser	Ser	Ser	Glu	Gln	Cys	Gln	Pro	His	Arg	Asn	Cys	Thr	Ala	
				165					170					175		
Leu	Gly	Leu	Ala	Leu	Asn	Val	Pro	Gly	Ser	Ser	Ser	His	Asp	Thr	Leu	
			180					185					190			
Cys	Thr	Ser	Cys	Thr	Gly	Phe	Pro	Leu	Ser	Thr	Arg	Val	Pro	Gly	Ala	
		195					200					205				
Glu	Glu	Cys	Glu	Arg	Ala	Val	Ile	Asp	Phe	Val	Ala	Phe	Gln	Asp	Ile	
	210					215					220					
Ser	Ile	Lys	Arg	Leu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu	Ala	Pro	Glu	
225					230					235					240	
Gly	Trp	Gly	Pro	Thr	Pro	Arg	Ala	Gly	Arg	Ala	Ala	Leu	Gln	Leu	Lys	
				245					250					255		
Leu	Arg	Arg	Arg	Leu	Thr	Glu	Leu	Leu	Gly	Ala	Gln	Asp	Gly	Ala	Leu	
			260					265					270			
Leu	Val	Arg	Leu	Leu	Gln	Ala	Leu	Arg	Val	Ala	Arg	Met	Pro	Gly	Leu	
		275					280					285				

Glu Arg Ser Val Arg Glu Arg Phe Leu Pro Val His
 290 295 300

<210> 152
 <211> 461
 <212> PRT
 <213> Homo sapiens

<400> 152
 Met Ala Pro Val Ala Val Trp Ala Ala Leu Ala Val Gly Leu Glu Leu
 1 5 10 15
 Trp Ala Ala Ala His Ala Leu Pro Ala Gln Val Ala Phe Thr Pro Tyr
 20 25 30
 Ala Pro Glu Pro Gly Ser Thr Cys Arg Leu Arg Glu Tyr Tyr Asp Gln
 35 40 45
 Thr Ala Gln Met Cys Cys Ser Lys Cys Ser Pro Gly Gln His Ala Lys
 50 55 60
 Val Phe Cys Thr Lys Thr Ser Asp Thr Val Cys Asp Ser Cys Glu Asp
 65 70 75 80
 Ser Thr Tyr Thr Gln Leu Trp Asn Trp Val Pro Glu Cys Leu Ser Cys
 85 90 95
 Gly Ser Arg Cys Ser Ser Asp Gln Val Glu Thr Gln Ala Cys Thr Arg
 100 105 110
 Glu Gln Asn Arg Ile Cys Thr Cys Arg Pro Gly Trp Tyr Cys Ala Leu
 115 120 125
 Ser Lys Gln Glu Gly Cys Arg Leu Cys Ala Pro Leu Arg Lys Cys Arg
 130 135 140
 Pro Gly Phe Gly Val Ala Arg Pro Gly Thr Glu Thr Ser Asp Val Val
 145 150 155 160
 Cys Lys Pro Cys Ala Pro Gly Thr Phe Ser Asn Thr Thr Ser Ser Thr
 165 170 175
 Asp Ile Cys Arg Pro His Gln Ile Cys Asn Val Val Ala Ile Pro Gly
 180 185 190
 Asn Ala Ser Met Asp Ala Val Cys Thr Ser Thr Ser Pro Thr Arg Ser
 195 200 205
 Met Ala Pro Gly Ala Val His Leu Pro Gln Pro Val Ser Thr Arg Ser
 210 215 220
 Gln His Thr Gln Pro Thr Pro Glu Pro Ser Thr Ala Pro Ser Thr Ser
 225 230 235 240
 Phe Leu Leu Pro Met Gly Pro Ser Pro Pro Ala Glu Gly Ser Thr Gly

245					250					255					
Asp	Phe	Ala	Leu	Pro	Val	Gly	Leu	Ile	Val	Gly	Val	Thr	Ala	Leu	Gly
			260					265					270		
Leu	Leu	Ile	Ile	Gly	Val	Val	Asn	Cys	Val	Ile	Met	Thr	Gln	Val	Lys
		275					280					285			
Lys	Lys	Pro	Leu	Cys	Leu	Gln	Arg	Glu	Ala	Lys	Val	Pro	His	Leu	Pro
		290				295					300				
Ala	Asp	Lys	Ala	Arg	Gly	Thr	Gln	Gly	Pro	Glu	Gln	Gln	His	Leu	Leu
305					310					315					320
Ile	Thr	Ala	Pro	Ser	Ser	Ser	Ser	Ser	Ser	Leu	Glu	Ser	Ser	Ala	Ser
				325					330					335	
Ala	Leu	Asp	Arg	Arg	Ala	Pro	Thr	Arg	Asn	Gln	Pro	Gln	Ala	Pro	Gly
			340					345					350		
Val	Glu	Ala	Ser	Gly	Ala	Gly	Glu	Ala	Arg	Ala	Ser	Thr	Gly	Ser	Ser
		355					360					365			
Asp	Ser	Ser	Pro	Gly	Gly	His	Gly	Thr	Gln	Val	Asn	Val	Thr	Cys	Ile
	370					375					380				
Val	Asn	Val	Cys	Ser	Ser	Ser	Asp	His	Ser	Ser	Gln	Cys	Ser	Ser	Gln
385					390					395					400
Ala	Ser	Ser	Thr	Met	Gly	Asp	Thr	Asp	Ser	Ser	Pro	Ser	Glu	Ser	Pro
				405					410					415	
Lys	Asp	Glu	Gln	Val	Pro	Phe	Ser	Lys	Glu	Glu	Cys	Ala	Phe	Arg	Ser
			420					425					430		
Gln	Leu	Glu	Thr	Pro	Glu	Thr	Leu	Leu	Gly	Ser	Thr	Glu	Glu	Lys	Pro
		435					440					445			
Leu	Pro	Leu	Gly	Val	Pro	Asp	Ala	Gly	Met	Lys	Pro	Ser			
	450					455					460				

<210> 153

<211> 166

<212> PRT

<213> Homo sapiens

<400> 153

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	

Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		

Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

35					40					45					
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 154

<211> 166

<212> PRT

<213> Homo sapiens

<400> 154

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg

Met	Ala	Pro	Gly	Ala	Val	His	Leu	Pro	Gln	Pro	Val	Ser	Thr	Arg	Ser
210						215					220				
Gln	His	Thr	Gln	Pro	Thr	Pro	Glu	Pro	Ser	Thr	Ala	Pro	Ser	Thr	Ser
225					230					235					240
Phe	Leu	Leu	Pro	Met	Gly	Pro	Ser	Pro	Pro	Ala	Glu	Gly	Ser	Thr	Gly
				245					250					255	
Asp	Phe	Ala	Leu	Pro	Val	Gly	Leu	Ile	Val	Gly	Val	Thr	Ala	Leu	Gly
			260					265					270		
Leu	Leu	Ile	Ile	Gly	Val	Val	Asn	Cys	Val	Ile	Met	Thr	Gln	Val	Lys
		275					280					285			
Lys	Lys	Pro	Leu	Cys	Leu	Gln	Arg	Glu	Ala	Lys	Val	Pro	His	Leu	Pro
290						295					300				
Ala	Asp	Lys	Ala	Arg	Gly	Thr	Gln	Gly	Pro	Glu	Gln	Gln	His	Leu	Leu
305					310					315					320
Ile	Thr	Ala	Pro	Ser	Ser	Ser	Ser	Ser	Ser	Leu	Glu	Ser	Ser	Ala	Ser
				325					330					335	
Ala	Leu	Asp	Arg	Arg	Ala	Pro	Thr	Arg	Asn	Gln	Pro	Gln	Ala	Pro	Gly
			340					345					350		
Val	Glu	Ala	Ser	Gly	Ala	Gly	Glu	Ala	Arg	Ala	Ser	Thr	Gly	Ser	Ser
		355					360					365			
Asp	Ser	Ser	Pro	Gly	Gly	His	Gly	Thr	Gln	Val	Asn	Val	Thr	Cys	Ile
370						375					380				
Val	Asn	Val	Cys	Ser	Ser	Ser	Asp	His	Ser	Ser	Gln	Cys	Ser	Ser	Gln
385					390					395					400
Ala	Ser	Ser	Thr	Met	Gly	Asp	Thr	Asp	Ser	Ser	Pro	Ser	Glu	Ser	Pro
				405					410					415	
Lys	Asp	Glu	Gln	Val	Pro	Phe	Ser	Lys	Glu	Glu	Cys	Ala	Phe	Arg	Ser
			420					425					430		
Gln	Leu	Glu	Thr	Pro	Glu	Thr	Leu	Leu	Gly	Ser	Thr	Glu	Glu	Lys	Pro
		435					440					445			
Leu	Pro	Leu	Gly	Val	Pro	Asp	Ala	Gly	Met	Lys	Pro	Ser			
450						455					460				

<210> 156

<211> 271

<212> PRT

<213> Homo sapiens

<400> 156

Val Ala Glu Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly Glu

1	5	10	15
Arg Leu Val Cys	Ala Gln Cys Pro	Pro Gly Thr Phe Val	Gln Arg Pro
20	25	30	
Cys Arg Arg Asp	Ser Pro Thr Thr	Cys Gly Pro Cys	Pro Arg His
35	40	45	
Tyr Thr Gln Phe	Trp Asn Tyr Leu	Glu Arg Cys Arg	Tyr Cys Asn Val
50	55	60	
Leu Cys Gly Glu	Arg Glu Glu Glu	Ala Arg Ala Cys	His Ala Thr His
65	70	75	80
Asn Arg Ala Cys	Arg Cys Arg Thr	Gly Phe Phe Ala	His Ala Gly Phe
85	90	95	
Cys Leu Glu His	Ala Ser Cys Pro	Pro Gly Ala Gly	Val Ile Ala Pro
100	105	110	
Gly Thr Pro Ser	Gln Asn Thr Gln	Cys Gln Pro Cys	Pro Pro Gly Thr
115	120	125	
Phe Ser Ala Ser	Ser Ser Ser Ser	Glu Gln Cys Gln	Pro His Arg Asn
130	135	140	
Cys Thr Ala Leu	Gly Leu Ala Leu	Asn Val Pro Gly	Ser Ser Ser His
145	150	155	160
Asp Thr Leu Cys	Thr Ser Cys Thr	Gly Phe Pro Leu	Ser Thr Arg Val
165	170	175	
Pro Gly Ala Glu	Glu Cys Glu Arg	Ala Val Ile Asp	Phe Val Ala Phe
180	185	190	
Gln Asp Ile Ser	Ile Lys Arg Leu	Gln Arg Leu Leu	Gln Ala Leu Glu
195	200	205	
Ala Pro Glu Gly	Trp Gly Pro Thr	Pro Arg Ala Gly	Arg Ala Ala Leu
210	215	220	
Gln Leu Lys Leu	Arg Arg Arg Leu	Thr Glu Leu Leu	Gly Ala Gln Asp
225	230	235	240
Gly Ala Leu Leu	Val Arg Leu Leu	Gln Ala Leu Arg	Val Ala Arg Met
245	250	255	
Pro Gly Leu Glu	Arg Ser Val Arg	Glu Arg Phe Leu	Pro Val His
260	265	270	

<210> 157

<211> 300

<212> PRT

<213> Homo sapiens

<400> 157

Met	Arg	Ala	Leu	Glu	Gly	Pro	Gly	Leu	Ser	Leu	Leu	Cys	Leu	Val	Leu
1				5					10					15	
Ala	Leu	Pro	Ala	Leu	Leu	Pro	Val	Pro	Ala	Val	Arg	Gly	Val	Ala	Glu
			20					25					30		
Thr	Pro	Thr	Tyr	Pro	Trp	Arg	Asp	Ala	Glu	Thr	Gly	Glu	Arg	Leu	Val
		35					40					45			
Cys	Ala	Gln	Cys	Pro	Pro	Gly	Thr	Phe	Val	Gln	Arg	Pro	Cys	Arg	Arg
	50					55					60				
Asp	Ser	Pro	Thr	Thr	Cys	Gly	Pro	Cys	Pro	Pro	Arg	His	Tyr	Thr	Gln
65					70					75					80
Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	Tyr	Cys	Asn	Val	Leu	Cys	Gly
				85					90					95	
Glu	Arg	Glu	Glu	Glu	Ala	Arg	Ala	Cys	His	Ala	Thr	His	Asn	Arg	Ala
			100					105					110		
Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	His	Ala	Gly	Phe	Cys	Leu	Glu
		115					120					125			
His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	Val	Ile	Ala	Pro	Gly	Thr	Pro
	130					135					140				
Ser	Gln	Asn	Thr	Gln	Cys	Gln	Pro	Cys	Pro	Pro	Gly	Thr	Phe	Ser	Ala
145					150					155					160
Ser	Ser	Ser	Ser	Ser	Glu	Gln	Cys	Gln	Pro	His	Arg	Asn	Cys	Thr	Ala
				165					170					175	
Leu	Gly	Leu	Ala	Leu	Asn	Val	Pro	Gly	Ser	Ser	Ser	His	Asp	Thr	Leu
			180					185					190		
Cys	Thr	Ser	Cys	Thr	Gly	Phe	Pro	Leu	Ser	Thr	Arg	Val	Pro	Gly	Ala
		195					200					205			
Glu	Glu	Cys	Glu	Arg	Ala	Val	Ile	Asp	Phe	Val	Ala	Phe	Gln	Asp	Ile
	210					215					220				
Ser	Ile	Lys	Arg	Leu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu	Ala	Pro	Glu
225					230					235					240
Gly	Trp	Gly	Pro	Thr	Pro	Arg	Ala	Gly	Arg	Ala	Ala	Leu	Gln	Leu	Lys
				245					250					255	
Leu	Arg	Arg	Arg	Leu	Thr	Glu	Leu	Leu	Gly	Ala	Gln	Asp	Gly	Ala	Leu
			260					265					270		
Leu	Val	Arg	Leu	Leu	Gln	Ala	Leu	Arg	Val	Ala	Arg	Met	Pro	Gly	Leu
		275					280					285			
Glu	Arg	Ser	Val	Arg	Glu	Arg	Phe	Leu	Pro	Val	His				
	290					295					300				

<210> 158
 <211> 300
 <212> PRT
 <213> Homo sapiens

<400> 158

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Met Arg Ala Leu Glu Gly Pro Gly Leu Ser Leu Leu Cys Leu Val Leu
 1           5           10           15

Ala Leu Pro Ala Leu Leu Pro Val Pro Ala Val Arg Gly Val Ala Glu
      20           25           30

Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly Glu Arg Leu Val
      35           40           45

Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg Pro Cys Arg Arg
      50           55           60

Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg His Tyr Thr Gln
      65           70           75           80

Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn Val Leu Cys Gly
      85           90           95

Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr His Asn Arg Ala
      100           105           110

Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly Phe Cys Leu Glu
      115           120           125

His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala Pro Gly Thr Pro
      130           135           140

Ser Gln Asn Thr Gln Cys Gln Pro Cys Pro Pro Gly Thr Phe Ser Ala
      145           150           155           160

Ser Ser Ser Ser Ser Glu Gln Cys Gln Pro His Arg Asn Cys Thr Ala
      165           170           175

Leu Gly Leu Ala Leu Asn Val Pro Gly Ser Ser Ser His Asp Thr Leu
      180           185           190

Cys Thr Ser Cys Thr Gly Phe Pro Leu Ser Thr Arg Val Pro Gly Ala
      195           200           205

Glu Glu Cys Glu Arg Ala Val Ile Asp Phe Val Ala Phe Gln Asp Ile
      210           215           220

Ser Ile Lys Arg Leu Gln Arg Leu Leu Gln Ala Leu Glu Ala Pro Glu
      225           230           235           240

Gly Trp Gly Pro Thr Pro Arg Ala Gly Arg Ala Ala Leu Gln Leu Lys
      245           250           255

Leu Arg Arg Arg Leu Thr Glu Leu Leu Gly Ala Gln Asp Gly Ala Leu

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	260		265		270
Leu Val Arg	Leu Leu Gln Ala	Leu Arg Val Ala Arg	Met	Pro Gly Leu	
	275		280	285	
Glu Arg Ser Val Arg Glu	Arg Phe Leu Pro Val	His			
	290	295	300		

<210> 159
 <211> 271
 <212> PRT
 <213> Homo sapiens

 <400> 159
 Val Ala Glu Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly Glu
 1 5 10 15
 Arg Leu Val Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg Pro
 20 25 30
 Cys Arg Arg Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg His
 35 40 45
 Tyr Thr Gln Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn Val
 50 55 60
 Leu Cys Gly Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr His
 65 70 75 80
 Asn Arg Ala Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly Phe
 85 90 95
 Cys Leu Glu His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala Pro
 100 105 110
 Gly Thr Pro Ser Gln Asn Thr Gln Cys Gln Pro Cys Pro Pro Gly Thr
 115 120 125
 Phe Ser Ala Ser Ser Ser Ser Ser Glu Gln Cys Gln Pro His Arg Asn
 130 135 140
 Cys Thr Ala Leu Gly Leu Ala Leu Asn Val Pro Gly Ser Ser Ser His
 145 150 155 160
 Asp Thr Leu Cys Thr Ser Cys Thr Gly Phe Pro Leu Ser Thr Arg Val
 165 170 175
 Pro Gly Ala Glu Glu Cys Glu Arg Ala Val Ile Asp Phe Val Ala Phe
 180 185 190
 Gln Asp Ile Ser Ile Lys Arg Leu Gln Arg Leu Leu Gln Ala Leu Glu
 195 200 205
 Ala Pro Glu Gly Trp Gly Pro Thr Pro Arg Ala Gly Arg Ala Ala Leu
 210 215 220

Gln Leu Lys Leu Arg Arg Arg Leu Thr Glu Leu Leu Gly Ala Gln Asp
 225 230 235 240

Gly Ala Leu Leu Val Arg Leu Leu Gln Ala Leu Arg Val Ala Arg Met
 245 250 255

Pro Gly Leu Glu Arg Ser Val Arg Glu Arg Phe Leu Pro Val His
 260 265 270

<210> 160
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 160
 Gly Asp Arg Leu His Cys Lys Pro Gln Arg Gln Ser Pro Trp Met Lys
 1 5 10 15

Cys Gln His Leu Asp Pro Glu Gly Gly Gly
 20 25

<210> 161
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 161
 Gly Asp Arg Leu His Cys Lys Pro Gln Arg Gln Ser Pro Trp Met Lys
 1 5 10 15

Cys Gln His Leu Asp Pro Glu Gly Gly Gly
 20 25

<210> 162
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 162
 Gly Asp Asp Asp Asp Cys Gly Trp Ile Gly Phe Ala Asn Phe His Leu
 1 5 10 15

Cys Leu His Gly Asp Pro Glu Gly Gly Gly
 20 25

<210> 163
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 163

Gly Asp Asp Asp Asp Cys Gly Trp Ile Gly Phe Ala Asn Phe His Leu
 1 5 10 15

Cys Leu His Gly Asp Pro Glu Gly Gly Gly
 20 25

<210> 164
 <211> 187
 <212> PRT
 <213> Homo sapiens

<400> 164
 Met Thr Asn Lys Cys Leu Leu Gln Ile Ala Leu Leu Leu Cys Phe Ser
 1 5 10 15

Thr Thr Ala Leu Ser Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg
 20 25 30

Ser Ser Asn Phe Gln Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg
 35 40 45

Leu Glu Tyr Cys Leu Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu
 50 55 60

Ile Lys Gln Leu Gln Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile
 65 70 75 80

Tyr Glu Met Leu Gln Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser
 85 90 95

Ser Thr Gly Trp Asn Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val
 100 105 110

Tyr His Gln Ile Asn His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu
 115 120 125

Lys Glu Asp Phe Thr Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys
 130 135 140

Arg Tyr Tyr Gly Arg Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser
 145 150 155 160

His Cys Ala Trp Thr Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr
 165 170 175

Phe Ile Asn Arg Leu Thr Gly Tyr Leu Arg Asn
 180 185

<210> 165
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 165

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1 5 10 15
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
 20 25 30
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
 35 40 45
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
 50 55 60
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
 65 70 75 80
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
 85 90 95
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
 100 105 110
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
 115 120 125
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
 130 135 140
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
 145 150 155 160
 Thr Gly Tyr Leu Arg Asn
 165

<210> 166
 <211> 187
 <212> PRT
 <213> Homo sapiens

<400> 166
 Met Thr Asn Lys Cys Leu Leu Gln Ile Ala Leu Leu Leu Cys Phe Ser
 1 5 10 15
 Thr Thr Ala Leu Ser Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg
 20 25 30
 Ser Ser Asn Phe Gln Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg
 35 40 45
 Leu Glu Tyr Cys Leu Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu
 50 55 60
 Ile Lys Gln Leu Gln Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile
 65 70 75 80
 Tyr Glu Met Leu Gln Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser
 85 90 95

Ser Thr Gly Trp Asn Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val
 100 105 110
 Tyr His Gln Ile Asn His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu
 115 120 125
 Lys Glu Asp Phe Thr Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys
 130 135 140
 Arg Tyr Tyr Gly Arg Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser
 145 150 155 160
 His Cys Ala Trp Thr Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr
 165 170 175
 Phe Ile Asn Arg Leu Thr Gly Tyr Leu Arg Asn
 180 185

<210> 167
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 167
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1 5 10 15
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
 20 25 30
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
 35 40 45
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
 50 55 60
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
 65 70 75 80
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
 85 90 95
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
 100 105 110
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
 115 120 125
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
 130 135 140
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
 145 150 155 160
 Thr Gly Tyr Leu Arg Asn

165

<210> 168
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 168
 Met His Trp Gly Thr Leu Cys Gly Phe Leu Trp Leu Trp Pro Tyr Leu
 1 5 10 15
 Phe Tyr Val Gln Ala Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys
 20 25 30
 Thr Leu Ile Lys Thr Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr
 35 40 45
 Gln Ser Val Ser Ser Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro
 50 55 60
 Gly Leu His Pro Ile Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala
 65 70 75 80
 Val Tyr Gln Gln Ile Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln
 85 90 95
 Ile Ser Asn Asp Leu Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala
 100 105 110
 Phe Ser Lys Ser Cys His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu
 115 120 125
 Asp Ser Leu Gly Gly Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val
 130 135 140
 Val Ala Leu Ser Arg Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln
 145 150 155 160
 Leu Asp Leu Ser Pro Gly Cys
 165

<210> 169
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 169
 Met His Trp Gly Thr Leu Cys Gly Phe Leu Trp Leu Trp Pro Tyr Leu
 1 5 10 15
 Phe Tyr Val Gln Ala Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys
 20 25 30
 Thr Leu Ile Lys Thr Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr
 35 40 45

Gln Ser Val Ser Ser Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro
 50 55 60
 Gly Leu His Pro Ile Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala
 65 70 75 80
 Val Tyr Gln Gln Ile Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln
 85 90 95
 Ile Ser Asn Asp Leu Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala
 100 105 110
 Phe Ser Lys Ser Cys His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu
 115 120 125
 Asp Ser Leu Gly Gly Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val
 130 135 140
 Val Ala Leu Ser Arg Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln
 145 150 155 160
 Leu Asp Leu Ser Pro Gly Cys
 165

<210> 170
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 170
 Met His Trp Gly Thr Leu Cys Gly Phe Leu Trp Leu Trp Pro Tyr Leu
 1 5 10 15
 Phe Tyr Val Gln Ala Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys
 20 25 30
 Thr Leu Ile Lys Thr Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr
 35 40 45
 Gln Ser Val Ser Ser Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro
 50 55 60
 Gly Leu His Pro Ile Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala
 65 70 75 80
 Val Tyr Gln Gln Ile Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln
 85 90 95
 Ile Ser Asn Asp Leu Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala
 100 105 110
 Phe Ser Lys Ser Cys His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu
 115 120 125
 Asp Ser Leu Gly Gly Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val

130	135	140
Val Ala Leu Ser Arg Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln		
145	150	155 160
Leu Asp Leu Ser Pro Gly Cys		
	165	

<210> 171
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 171

Met His Trp Gly Thr Leu Cys Gly Phe Leu Trp Leu Trp Pro Tyr Leu		
1	5	10 15
Phe Tyr Val Gln Ala Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys		
	20	25 30
Thr Leu Ile Lys Thr Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr		
	35	40 45
Gln Ser Val Ser Ser Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro		
	50	55 60
Gly Leu His Pro Ile Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala		
	65	70 75 80
Val Tyr Gln Gln Ile Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln		
	85	90 95
Ile Ser Asn Asp Leu Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala		
	100	105 110
Phe Ser Lys Ser Cys His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu		
	115	120 125
Asp Ser Leu Gly Gly Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val		
	130	135 140
Val Ala Leu Ser Arg Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln		
145	150	155 160
Leu Asp Leu Ser Pro Gly Cys		
	165	

<210> 172
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 172

Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met

1		5		10		15									
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
		20						25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35					40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70				75						80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
			100					105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
		115					120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 173
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 173
Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
1 5 10 15
Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
20 25 30
Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
35 40 45
Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
50 55 60

<210> 174
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 174

Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
1 5 10 15

Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
20 25 30

Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
35 40 45

Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
50 55 60

<210> 175

<211> 58

<212> PRT

<213> Homo sapiens

<400> 175

Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
1 5 10 15

Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Gly
20 25 30

Gly Pro Gly Lys Arg Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys
35 40 45

Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
50 55

<210> 176

<211> 58

<212> PRT

<213> Homo sapiens

<400> 176

Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
1 5 10 15

Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Gly
20 25 30

Gly Pro Gly Lys Arg Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys
35 40 45

Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
50 55

<210> 177

<211> 108

<212> PRT

<213> Homo sapiens

<400> 177

```
Met Lys Ala Leu Cys Leu Leu Leu Leu Pro Val Leu Gly Leu Leu Val
  1           5           10           15

Ser Ser Lys Thr Leu Cys Ser Met Glu Glu Ala Ile Asn Glu Arg Ile
      20           25           30

Gln Glu Val Ala Gly Ser Leu Ile Phe Arg Ala Ile Ser Ser Ile Gly
      35           40           45

Leu Glu Cys Gln Ser Val Thr Ser Arg Gly Asp Leu Ala Thr Cys Pro
  50           55           60

Arg Gly Phe Ala Val Thr Gly Cys Thr Cys Gly Ser Ala Cys Gly Ser
  65           70           75           80

Trp Asp Val Arg Ala Glu Thr Thr Cys His Cys Gln Cys Ala Gly Met
      85           90           95

Asp Trp Thr Gly Ala Arg Cys Cys Arg Val Gln Pro
      100           105
```

<210> 178

<211> 108

<212> PRT

<213> Homo sapiens

<400> 178

```
Met Lys Ala Leu Cys Leu Leu Leu Leu Pro Val Leu Gly Leu Leu Val
  1           5           10           15

Ser Ser Lys Thr Leu Cys Ser Met Glu Glu Ala Ile Asn Glu Arg Ile
      20           25           30

Gln Glu Val Ala Gly Ser Leu Ile Phe Arg Ala Ile Ser Ser Ile Gly
      35           40           45

Leu Glu Cys Gln Ser Val Thr Ser Arg Gly Asp Leu Ala Thr Cys Pro
  50           55           60

Arg Gly Phe Ala Val Thr Gly Cys Thr Cys Gly Ser Ala Cys Gly Ser
  65           70           75           80

Trp Asp Val Arg Ala Glu Thr Thr Cys His Cys Gln Cys Ala Gly Met
      85           90           95

Asp Trp Thr Gly Ala Arg Cys Cys Arg Val Gln Pro
      100           105
```

<210> 179

<211> 108

<212> PRT

<213> Homo sapiens

<400> 179

```
Met Lys Ala Leu Cys Leu Leu Leu Leu Pro Val Leu Gly Leu Leu Val
  1           5           10           15

Ser Ser Lys Thr Leu Cys Ser Met Glu Glu Ala Ile Asn Glu Arg Ile
      20           25           30

Gln Glu Val Ala Gly Ser Leu Ile Phe Arg Ala Ile Ser Ser Ile Gly
      35           40           45

Leu Glu Cys Gln Ser Val Thr Ser Arg Gly Asp Leu Ala Thr Cys Pro
  50           55           60

Arg Gly Phe Ala Val Thr Gly Cys Thr Cys Gly Ser Ala Cys Gly Ser
  65           70           75           80

Trp Asp Val Arg Ala Glu Thr Thr Cys His Cys Gln Cys Ala Gly Met
      85           90           95

Asp Trp Thr Gly Ala Arg Cys Cys Arg Val Gln Pro
      100           105
```

<210> 180

<211> 108

<212> PRT

<213> Homo sapiens

<400> 180

```
Met Lys Ala Leu Cys Leu Leu Leu Leu Pro Val Leu Gly Leu Leu Val
  1           5           10           15

Ser Ser Lys Thr Leu Cys Ser Met Glu Glu Ala Ile Asn Glu Arg Ile
      20           25           30

Gln Glu Val Ala Gly Ser Leu Ile Phe Arg Ala Ile Ser Ser Ile Gly
      35           40           45

Leu Glu Cys Gln Ser Val Thr Ser Arg Gly Asp Leu Ala Thr Cys Pro
  50           55           60

Arg Gly Phe Ala Val Thr Gly Cys Thr Cys Gly Ser Ala Cys Gly Ser
  65           70           75           80

Trp Asp Val Arg Ala Glu Thr Thr Cys His Cys Gln Cys Ala Gly Met
      85           90           95

Asp Trp Thr Gly Ala Arg Cys Cys Arg Val Gln Pro
      100           105
```

<210> 181

<211> 108

<212> PRT

<213> Homo sapiens

<400> 181

Met Lys Ala Leu Cys Leu Leu Leu Leu Pro Val Leu Gly Leu Leu Val
1 5 10 15
Ser Ser Lys Thr Leu Cys Ser Met Glu Glu Ala Ile Asn Glu Arg Ile
20 25 30
Gln Glu Val Ala Gly Ser Leu Ile Phe Arg Ala Ile Ser Ser Ile Gly
35 40 45
Leu Glu Cys Gln Ser Val Thr Ser Arg Gly Asp Leu Ala Thr Cys Pro
50 55 60
Arg Gly Phe Ala Val Thr Gly Cys Thr Cys Gly Ser Ala Cys Gly Ser
65 70 75 80
Trp Asp Val Arg Ala Glu Thr Thr Cys His Cys Gln Cys Ala Gly Met
85 90 95
Asp Trp Thr Gly Ala Arg Cys Cys Arg Val Gln Pro
100 105

<210> 182

<211> 429

<212> PRT

<213> Homo sapiens

<400> 182

Met Cys Pro Gly Ala Leu Trp Val Ala Leu Pro Leu Leu Ser Leu Leu
1 5 10 15
Ala Gly Ser Leu Gln Gly Lys Pro Leu Gln Ser Trp Gly Arg Gly Ser
20 25 30
Ala Gly Gly Asn Ala His Ser Pro Leu Gly Val Pro Gly Gly Gly Leu
35 40 45
Pro Glu His Thr Phe Asn Leu Lys Met Phe Leu Glu Asn Val Lys Val
50 55 60
Asp Phe Leu Arg Ser Leu Asn Leu Ser Gly Val Pro Ser Gln Asp Lys
65 70 75 80
Thr Arg Val Glu Pro Pro Gln Tyr Met Ile Asp Leu Tyr Asn Arg Tyr
85 90 95
Thr Ser Asp Lys Ser Thr Thr Pro Ala Ser Asn Ile Val Arg Ser Phe
100 105 110
Ser Met Glu Asp Ala Ile Ser Ile Thr Ala Thr Glu Asp Phe Pro Phe
115 120 125
Gln Lys His Ile Leu Leu Phe Asn Ile Ser Ile Pro Arg His Glu Gln
130 135 140

Ile	Thr	Arg	Ala	Glu	Leu	Arg	Leu	Tyr	Val	Ser	Cys	Gln	Asn	His	Val	145	150	155	160
Asp	Pro	Ser	His	Asp	Leu	Lys	Gly	Ser	Val	Val	Ile	Tyr	Asp	Val	Leu	165	170	175	
Asp	Gly	Thr	Asp	Ala	Trp	Asp	Ser	Ala	Thr	Glu	Thr	Lys	Thr	Phe	Leu	180	185	190	
Val	Ser	Gln	Asp	Ile	Gln	Asp	Glu	Gly	Trp	Glu	Thr	Leu	Glu	Val	Ser	195	200	205	
Ser	Ala	Val	Lys	Arg	Trp	Val	Arg	Ser	Asp	Ser	Thr	Lys	Ser	Lys	Asn	210	215	220	
Lys	Leu	Glu	Val	Thr	Val	Glu	Ser	His	Arg	Lys	Gly	Cys	Asp	Thr	Leu	225	230	235	240
Asp	Ile	Ser	Val	Pro	Pro	Gly	Ser	Arg	Asn	Leu	Pro	Phe	Phe	Val	Val	245	250	255	
Phe	Ser	Asn	Asp	His	Ser	Ser	Gly	Thr	Lys	Glu	Thr	Arg	Leu	Glu	Leu	260	265	270	
Arg	Glu	Met	Ile	Ser	His	Glu	Gln	Glu	Ser	Val	Leu	Lys	Lys	Leu	Ser	275	280	285	
Lys	Asp	Gly	Ser	Thr	Glu	Ala	Gly	Glu	Ser	Ser	His	Glu	Glu	Asp	Thr	290	295	300	
Asp	Gly	His	Val	Ala	Ala	Gly	Ser	Thr	Leu	Ala	Arg	Arg	Lys	Arg	Ser	305	310	315	320
Ala	Gly	Ala	Gly	Ser	His	Cys	Gln	Lys	Thr	Ser	Leu	Arg	Val	Asn	Phe	325	330	335	
Glu	Asp	Ile	Gly	Trp	Asp	Ser	Trp	Ile	Ile	Ala	Pro	Lys	Glu	Tyr	Glu	340	345	350	
Ala	Tyr	Glu	Cys	Lys	Gly	Gly	Cys	Phe	Phe	Pro	Leu	Ala	Asp	Asp	Val	355	360	365	
Thr	Pro	Thr	Lys	His	Ala	Ile	Val	Gln	Thr	Leu	Val	His	Leu	Lys	Phe	370	375	380	
Pro	Thr	Lys	Val	Gly	Lys	Ala	Cys	Cys	Val	Pro	Thr	Lys	Leu	Ser	Pro	385	390	395	400
Ile	Ser	Val	Leu	Tyr	Lys	Asp	Asp	Met	Gly	Val	Pro	Thr	Leu	Lys	Tyr	405	410	415	
His	Tyr	Glu	Gly	Met	Ser	Val	Ala	Glu	Cys	Gly	Cys	Arg				420	425		

<210> 183

<211> 429

<212> PRT

<213> Homo sapiens

<400> 183

Met	Cys	Pro	Gly	Ala	Leu	Trp	Val	Ala	Leu	Pro	Leu	Leu	Ser	Leu	Leu
1				5					10					15	
Ala	Gly	Ser	Leu	Gln	Gly	Lys	Pro	Leu	Gln	Ser	Trp	Gly	Arg	Gly	Ser
			20					25					30		
Ala	Gly	Gly	Asn	Ala	His	Ser	Pro	Leu	Gly	Val	Pro	Gly	Gly	Gly	Leu
		35					40					45			
Pro	Glu	His	Thr	Phe	Asn	Leu	Lys	Met	Phe	Leu	Glu	Asn	Val	Lys	Val
	50					55					60				
Asp	Phe	Leu	Arg	Ser	Leu	Asn	Leu	Ser	Gly	Val	Pro	Ser	Gln	Asp	Lys
65					70					75					80
Thr	Arg	Val	Glu	Pro	Pro	Gln	Tyr	Met	Ile	Asp	Leu	Tyr	Asn	Arg	Tyr
				85					90					95	
Thr	Ser	Asp	Lys	Ser	Thr	Thr	Pro	Ala	Ser	Asn	Ile	Val	Arg	Ser	Phe
			100					105					110		
Ser	Met	Glu	Asp	Ala	Ile	Ser	Ile	Thr	Ala	Thr	Glu	Asp	Phe	Pro	Phe
		115					120					125			
Gln	Lys	His	Ile	Leu	Leu	Phe	Asn	Ile	Ser	Ile	Pro	Arg	His	Glu	Gln
	130					135					140				
Ile	Thr	Arg	Ala	Glu	Leu	Arg	Leu	Tyr	Val	Ser	Cys	Gln	Asn	His	Val
145					150					155					160
Asp	Pro	Ser	His	Asp	Leu	Lys	Gly	Ser	Val	Val	Ile	Tyr	Asp	Val	Leu
				165					170					175	
Asp	Gly	Thr	Asp	Ala	Trp	Asp	Ser	Ala	Thr	Glu	Thr	Lys	Thr	Phe	Leu
			180					185						190	
Val	Ser	Gln	Asp	Ile	Gln	Asp	Glu	Gly	Trp	Glu	Thr	Leu	Glu	Val	Ser
		195					200					205			
Ser	Ala	Val	Lys	Arg	Trp	Val	Arg	Ser	Asp	Ser	Thr	Lys	Ser	Lys	Asn
	210					215					220				
Lys	Leu	Glu	Val	Thr	Val	Glu	Ser	His	Arg	Lys	Gly	Cys	Asp	Thr	Leu
225					230					235					240
Asp	Ile	Ser	Val	Pro	Pro	Gly	Ser	Arg	Asn	Leu	Pro	Phe	Phe	Val	Val
				245					250					255	
Phe	Ser	Asn	Asp	His	Ser	Ser	Gly	Thr	Lys	Glu	Thr	Arg	Leu	Glu	Leu
			260					265					270		
Arg	Glu	Met	Ile	Ser	His	Glu	Gln	Glu	Ser	Val	Leu	Lys	Lys	Leu	Ser
		275					280					285			

Lys Asp Gly Ser Thr Glu Ala Gly Glu Ser Ser His Glu Glu Asp Thr
 290 295 300
 Asp Gly His Val Ala Ala Gly Ser Thr Leu Ala Arg Arg Lys Arg Ser
 305 310 315 320
 Ala Gly Ala Gly Ser His Cys Gln Lys Thr Ser Leu Arg Val Asn Phe
 325 330 335
 Glu Asp Ile Gly Trp Asp Ser Trp Ile Ile Ala Pro Lys Glu Tyr Glu
 340 345 350
 Ala Tyr Glu Cys Lys Gly Gly Cys Phe Phe Pro Leu Ala Asp Asp Val
 355 360 365
 Thr Pro Thr Lys His Ala Ile Val Gln Thr Leu Val His Leu Lys Phe
 370 375 380
 Pro Thr Lys Val Gly Lys Ala Cys Cys Val Pro Thr Lys Leu Ser Pro
 385 390 395 400
 Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val Pro Thr Leu Lys Tyr
 405 410 415
 His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly Cys Arg
 420 425

<210> 184
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 184

Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
 1 5 10 15
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
 20 25 30
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
 35 40 45
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
 50 55 60
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
 65 70 75 80
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
 85 90 95
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
 100 105 110

Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
 115 120 125
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
 130 135 140
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
 145 150 155 160
 Leu Arg Ser Lys Glu
 165

<210> 185
 <211> 429
 <212> PRT
 <213> Homo sapiens

<400> 185
 Met Cys Pro Gly Ala Leu Trp Val Ala Leu Pro Leu Leu Ser Leu Leu
 1 5 10 15
 Ala Gly Ser Leu Gln Gly Lys Pro Leu Gln Ser Trp Gly Arg Gly Ser
 20 25 30
 Ala Gly Gly Asn Ala His Ser Pro Leu Gly Val Pro Gly Gly Gly Leu
 35 40 45
 Pro Glu His Thr Phe Asn Leu Lys Met Phe Leu Glu Asn Val Lys Val
 50 55 60
 Asp Phe Leu Arg Ser Leu Asn Leu Ser Gly Val Pro Ser Gln Asp Lys
 65 70 75 80
 Thr Arg Val Glu Pro Pro Gln Tyr Met Ile Asp Leu Tyr Asn Arg Tyr
 85 90 95
 Thr Ser Asp Lys Ser Thr Thr Pro Ala Ser Asn Ile Val Arg Ser Phe
 100 105 110
 Ser Met Glu Asp Ala Ile Ser Ile Thr Ala Thr Glu Asp Phe Pro Phe
 115 120 125
 Gln Lys His Ile Leu Leu Phe Asn Ile Ser Ile Pro Arg His Glu Gln
 130 135 140
 Ile Thr Arg Ala Glu Leu Arg Leu Tyr Val Ser Cys Gln Asn His Val
 145 150 155 160
 Asp Pro Ser His Asp Leu Lys Gly Ser Val Val Ile Tyr Asp Val Leu
 165 170 175
 Asp Gly Thr Asp Ala Trp Asp Ser Ala Thr Glu Thr Lys Thr Phe Leu
 180 185 190
 Val Ser Gln Asp Ile Gln Asp Glu Gly Trp Glu Thr Leu Glu Val Ser
 195 200 205

Ser Ala Val Lys Arg Trp Val Arg Ser Asp Ser Thr Lys Ser Lys Asn
 210 215 220
 Lys Leu Glu Val Thr Val Glu Ser His Arg Lys Gly Cys Asp Thr Leu
 225 230 235 240
 Asp Ile Ser Val Pro Pro Gly Ser Arg Asn Leu Pro Phe Phe Val Val
 245 250 255
 Phe Ser Asn Asp His Ser Ser Gly Thr Lys Glu Thr Arg Leu Glu Leu
 260 265 270
 Arg Glu Met Ile Ser His Glu Gln Glu Ser Val Leu Lys Lys Leu Ser
 275 280 285
 Lys Asp Gly Ser Thr Glu Ala Gly Glu Ser Ser His Glu Glu Asp Thr
 290 295 300
 Asp Gly His Val Ala Ala Gly Ser Thr Leu Ala Arg Arg Lys Arg Ser
 305 310 315 320
 Ala Gly Ala Gly Ser His Cys Gln Lys Thr Ser Leu Arg Val Asn Phe
 325 330 335
 Glu Asp Ile Gly Trp Asp Ser Trp Ile Ile Ala Pro Lys Glu Tyr Glu
 340 345 350
 Ala Tyr Glu Cys Lys Gly Gly Cys Phe Phe Pro Leu Ala Asp Asp Val
 355 360 365
 Thr Pro Thr Lys His Ala Ile Val Gln Thr Leu Val His Leu Lys Phe
 370 375 380
 Pro Thr Lys Val Gly Lys Ala Cys Cys Val Pro Thr Lys Leu Ser Pro
 385 390 395 400
 Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val Pro Thr Leu Lys Tyr
 405 410 415
 His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly Cys Arg
 420 425

<210> 186

<211> 429

<212> PRT

<213> Homo sapiens

<400> 186

Met Cys Pro Gly Ala Leu Trp Val Ala Leu Pro Leu Leu Ser Leu Leu
 1 5 10 15

Ala Gly Ser Leu Gln Gly Lys Pro Leu Gln Ser Trp Gly Arg Gly Ser
 20 25 30

Ala Gly Gly Asn Ala His Ser Pro Leu Gly Val Pro Gly Gly Gly Leu

35					40					45					
Pro	Glu	His	Thr	Phe	Asn	Leu	Lys	Met	Phe	Leu	Glu	Asn	Val	Lys	Val
	50					55					60				
Asp	Phe	Leu	Arg	Ser	Leu	Asn	Leu	Ser	Gly	Val	Pro	Ser	Gln	Asp	Lys
	65					70					75				80
Thr	Arg	Val	Glu	Pro	Pro	Gln	Tyr	Met	Ile	Asp	Leu	Tyr	Asn	Arg	Tyr
				85					90					95	
Thr	Ser	Asp	Lys	Ser	Thr	Thr	Pro	Ala	Ser	Asn	Ile	Val	Arg	Ser	Phe
			100					105					110		
Ser	Met	Glu	Asp	Ala	Ile	Ser	Ile	Thr	Ala	Thr	Glu	Asp	Phe	Pro	Phe
		115					120					125			
Gln	Lys	His	Ile	Leu	Leu	Phe	Asn	Ile	Ser	Ile	Pro	Arg	His	Glu	Gln
	130					135					140				
Ile	Thr	Arg	Ala	Glu	Leu	Arg	Leu	Tyr	Val	Ser	Cys	Gln	Asn	His	Val
	145					150					155				160
Asp	Pro	Ser	His	Asp	Leu	Lys	Gly	Ser	Val	Val	Ile	Tyr	Asp	Val	Leu
				165					170					175	
Asp	Gly	Thr	Asp	Ala	Trp	Asp	Ser	Ala	Thr	Glu	Thr	Lys	Thr	Phe	Leu
			180					185						190	
Val	Ser	Gln	Asp	Ile	Gln	Asp	Glu	Gly	Trp	Glu	Thr	Leu	Glu	Val	Ser
		195					200					205			
Ser	Ala	Val	Lys	Arg	Trp	Val	Arg	Ser	Asp	Ser	Thr	Lys	Ser	Lys	Asn
	210					215					220				
Lys	Leu	Glu	Val	Thr	Val	Glu	Ser	His	Arg	Lys	Gly	Cys	Asp	Thr	Leu
	225					230					235				240
Asp	Ile	Ser	Val	Pro	Pro	Gly	Ser	Arg	Asn	Leu	Pro	Phe	Phe	Val	Val
				245					250					255	
Phe	Ser	Asn	Asp	His	Ser	Ser	Gly	Thr	Lys	Glu	Thr	Arg	Leu	Glu	Leu
			260					265					270		
Arg	Glu	Met	Ile	Ser	His	Glu	Gln	Glu	Ser	Val	Leu	Lys	Lys	Leu	Ser
		275					280					285			
Lys	Asp	Gly	Ser	Thr	Glu	Ala	Gly	Glu	Ser	Ser	His	Glu	Glu	Asp	Thr
	290					295					300				
Asp	Gly	His	Val	Ala	Ala	Gly	Ser	Thr	Leu	Ala	Arg	Arg	Lys	Arg	Ser
	305					310					315				320
Ala	Gly	Ala	Gly	Ser	His	Cys	Gln	Lys	Thr	Ser	Leu	Arg	Val	Asn	Phe
				325					330					335	
Glu	Asp	Ile	Gly	Trp	Asp	Ser	Trp	Ile	Ile	Ala	Pro	Lys	Glu	Tyr	Glu

Asp Gly Thr Asp Ala Trp Asp Ser Ala Thr Glu Thr Lys Thr Phe Leu
 180 185 190
 Val Ser Gln Asp Ile Gln Asp Glu Gly Trp Glu Thr Leu Glu Val Ser
 195 200 205
 Ser Ala Val Lys Arg Trp Val Arg Ser Asp Ser Thr Lys Ser Lys Asn
 210 215 220
 Lys Leu Glu Val Thr Val Glu Ser His Arg Lys Gly Cys Asp Thr Leu
 225 230 235 240
 Asp Ile Ser Val Pro Pro Gly Ser Arg Asn Leu Pro Phe Phe Val Val
 245 250 255
 Phe Ser Asn Asp His Ser Ser Gly Thr Lys Glu Thr Arg Leu Glu Leu
 260 265 270
 Arg Glu Met Ile Ser His Glu Gln Glu Ser Val Leu Lys Lys Leu Ser
 275 280 285
 Lys Asp Gly Ser Thr Glu Ala Gly Glu Ser Ser His Glu Glu Asp Thr
 290 295 300
 Asp Gly His Val Ala Ala Gly Ser Thr Leu Ala Arg Arg Lys Arg Ser
 305 310 315 320
 Ala Gly Ala Gly Ser His Cys Gln Lys Thr Ser Leu Arg Val Asn Phe
 325 330 335
 Glu Asp Ile Gly Trp Asp Ser Trp Ile Ile Ala Pro Lys Glu Tyr Glu
 340 345 350
 Ala Tyr Glu Cys Lys Gly Gly Cys Phe Phe Pro Leu Ala Asp Asp Val
 355 360 365
 Thr Pro Thr Lys His Ala Ile Val Gln Thr Leu Val His Leu Lys Phe
 370 375 380
 Pro Thr Lys Val Gly Lys Ala Cys Cys Val Pro Thr Lys Leu Ser Pro
 385 390 395 400
 Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val Pro Thr Leu Lys Tyr
 405 410 415
 His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly Cys Arg
 420 425

<210> 188

<211> 429

<212> PRT

<213> Homo sapiens

<400> 188

Met Cys Pro Gly Ala Leu Trp Val Ala Leu Pro Leu Leu Ser Leu Leu
 1 5 10 15

Ala Gly Ser Leu Gln Gly Lys Pro Leu Gln Ser Trp Gly Arg Gly Ser
 20 25 30
 Ala Gly Gly Asn Ala His Ser Pro Leu Gly Val Pro Gly Gly Gly Leu
 35 40 45
 Pro Glu His Thr Phe Asn Leu Lys Met Phe Leu Glu Asn Val Lys Val
 50 55 60
 Asp Phe Leu Arg Ser Leu Asn Leu Ser Gly Val Pro Ser Gln Asp Lys
 65 70 75 80
 Thr Arg Val Glu Pro Pro Gln Tyr Met Ile Asp Leu Tyr Asn Arg Tyr
 85 90 95
 Thr Ser Asp Lys Ser Thr Thr Pro Ala Ser Asn Ile Val Arg Ser Phe
 100 105 110
 Ser Met Glu Asp Ala Ile Ser Ile Thr Ala Thr Glu Asp Phe Pro Phe
 115 120 125
 Gln Lys His Ile Leu Leu Phe Asn Ile Ser Ile Pro Arg His Glu Gln
 130 135 140
 Ile Thr Arg Ala Glu Leu Arg Leu Tyr Val Ser Cys Gln Asn His Val
 145 150 155 160
 Asp Pro Ser His Asp Leu Lys Gly Ser Val Val Ile Tyr Asp Val Leu
 165 170 175
 Asp Gly Thr Asp Ala Trp Asp Ser Ala Thr Glu Thr Lys Thr Phe Leu
 180 185 190
 Val Ser Gln Asp Ile Gln Asp Glu Gly Trp Glu Thr Leu Glu Val Ser
 195 200 205
 Ser Ala Val Lys Arg Trp Val Arg Ser Asp Ser Thr Lys Ser Lys Asn
 210 215 220
 Lys Leu Glu Val Thr Val Glu Ser His Arg Lys Gly Cys Asp Thr Leu
 225 230 235 240
 Asp Ile Ser Val Pro Pro Gly Ser Arg Asn Leu Pro Phe Phe Val Val
 245 250 255
 Phe Ser Asn Asp His Ser Ser Gly Thr Lys Glu Thr Arg Leu Glu Leu
 260 265 270
 Arg Glu Met Ile Ser His Glu Gln Glu Ser Val Leu Lys Lys Leu Ser
 275 280 285
 Lys Asp Gly Ser Thr Glu Ala Gly Glu Ser Ser His Glu Glu Asp Thr
 290 295 300
 Asp Gly His Val Ala Ala Gly Ser Thr Leu Ala Arg Arg Lys Arg Ser
 305 310 315 320

Ala Gly Ala Gly Ser His Cys Gln Lys Thr Ser Leu Arg Val Asn Phe
325 330 335

Glu Asp Ile Gly Trp Asp Ser Trp Ile Ile Ala Pro Lys Glu Tyr Glu
340 345 350

Ala Tyr Glu Cys Lys Gly Gly Cys Phe Phe Pro Leu Ala Asp Asp Val
355 360 365

Thr Pro Thr Lys His Ala Ile Val Gln Thr Leu Val His Leu Lys Phe
370 375 380

Pro Thr Lys Val Gly Lys Ala Cys Cys Val Pro Thr Lys Leu Ser Pro
385 390 395 400

Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val Pro Thr Leu Lys Tyr
405 410 415

His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly Cys Arg
420 425

<210> 189
<211> 165
<212> PRT
<213> Homo sapiens

<400> 189
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
1 5 10 15

Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
20 25 30

Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
35 40 45

Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
50 55 60

Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
65 70 75 80

Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
85 90 95

Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
100 105 110

Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
115 120 125

Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
130 135 140

Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser

Asp Ile Ser Val Pro Pro Gly Ser Arg Asn Leu Pro Phe Phe Val Val
 245 250 255
 Phe Ser Asn Asp His Ser Ser Gly Thr Lys Glu Thr Arg Leu Glu Leu
 260 265 270
 Arg Glu Met Ile Ser His Glu Gln Glu Ser Val Leu Lys Lys Leu Ser
 275 280 285
 Lys Asp Gly Ser Thr Glu Ala Gly Glu Ser Ser His Glu Glu Asp Thr
 290 295 300
 Asp Gly His Val Ala Ala Gly Ser Thr Leu Ala Arg Arg Lys Arg Ser
 305 310 315 320
 Ala Gly Ala Gly Ser His Cys Gln Lys Thr Ser Leu Arg Val Asn Phe
 325 330 335
 Glu Asp Ile Gly Trp Asp Ser Trp Ile Ile Ala Pro Lys Glu Tyr Glu
 340 345 350
 Ala Tyr Glu Cys Lys Gly Gly Cys Phe Phe Pro Leu Ala Asp Asp Val
 355 360 365
 Thr Pro Thr Lys His Ala Ile Val Gln Thr Leu Val His Leu Lys Phe
 370 375 380
 Pro Thr Lys Val Gly Lys Ala Cys Cys Val Pro Thr Lys Leu Ser Pro
 385 390 395 400
 Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val Pro Thr Leu Lys Tyr
 405 410 415
 His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly Cys Arg
 420 425

<210> 191

<211> 429

<212> PRT

<213> Homo sapiens

<400> 191

Met Cys Pro Gly Ala Leu Trp Val Ala Leu Pro Leu Leu Ser Leu Leu
 1 5 10 15
 Ala Gly Ser Leu Gln Gly Lys Pro Leu Gln Ser Trp Gly Arg Gly Ser
 20 25 30
 Ala Gly Gly Asn Ala His Ser Pro Leu Gly Val Pro Gly Gly Gly Leu
 35 40 45
 Pro Glu His Thr Phe Asn Leu Lys Met Phe Leu Glu Asn Val Lys Val
 50 55 60
 Asp Phe Leu Arg Ser Leu Asn Leu Ser Gly Val Pro Ser Gln Asp Lys
 65 70 75 80

Thr	Arg	Val	Glu	Pro	Pro	Gln	Tyr	Met	Ile	Asp	Leu	Tyr	Asn	Arg	Tyr	85	90	95
Thr	Ser	Asp	Lys	Ser	Thr	Thr	Pro	Ala	Ser	Asn	Ile	Val	Arg	Ser	Phe	100	105	110
Ser	Met	Glu	Asp	Ala	Ile	Ser	Ile	Thr	Ala	Thr	Glu	Asp	Phe	Pro	Phe	115	120	125
Gln	Lys	His	Ile	Leu	Leu	Phe	Asn	Ile	Ser	Ile	Pro	Arg	His	Glu	Gln	130	135	140
Ile	Thr	Arg	Ala	Glu	Leu	Arg	Leu	Tyr	Val	Ser	Cys	Gln	Asn	His	Val	145	150	155
Asp	Pro	Ser	His	Asp	Leu	Lys	Gly	Ser	Val	Val	Ile	Tyr	Asp	Val	Leu	165	170	175
Asp	Gly	Thr	Asp	Ala	Trp	Asp	Ser	Ala	Thr	Glu	Thr	Lys	Thr	Phe	Leu	180	185	190
Val	Ser	Gln	Asp	Ile	Gln	Asp	Glu	Gly	Trp	Glu	Thr	Leu	Glu	Val	Ser	195	200	205
Ser	Ala	Val	Lys	Arg	Trp	Val	Arg	Ser	Asp	Ser	Thr	Lys	Ser	Lys	Asn	210	215	220
Lys	Leu	Glu	Val	Thr	Val	Glu	Ser	His	Arg	Lys	Gly	Cys	Asp	Thr	Leu	225	230	235
Asp	Ile	Ser	Val	Pro	Pro	Gly	Ser	Arg	Asn	Leu	Pro	Phe	Phe	Val	Val	245	250	255
Phe	Ser	Asn	Asp	His	Ser	Ser	Gly	Thr	Lys	Glu	Thr	Arg	Leu	Glu	Leu	260	265	270
Arg	Glu	Met	Ile	Ser	His	Glu	Gln	Glu	Ser	Val	Leu	Lys	Lys	Leu	Ser	275	280	285
Lys	Asp	Gly	Ser	Thr	Glu	Ala	Gly	Glu	Ser	Ser	His	Glu	Glu	Asp	Thr	290	295	300
Asp	Gly	His	Val	Ala	Ala	Gly	Ser	Thr	Leu	Ala	Arg	Arg	Lys	Arg	Ser	305	310	315
Ala	Gly	Ala	Gly	Ser	His	Cys	Gln	Lys	Thr	Ser	Leu	Arg	Val	Asn	Phe	325	330	335
Glu	Asp	Ile	Gly	Trp	Asp	Ser	Trp	Ile	Ile	Ala	Pro	Lys	Glu	Tyr	Glu	340	345	350
Ala	Tyr	Glu	Cys	Lys	Gly	Gly	Cys	Phe	Phe	Pro	Leu	Ala	Asp	Asp	Val	355	360	365
Thr	Pro	Thr	Lys	His	Ala	Ile	Val	Gln	Thr	Leu	Val	His	Leu	Lys	Phe	370	375	380

Pro Thr Lys Val Gly Lys Ala Cys Cys Val Pro Thr Lys Leu Ser Pro
385 390 395 400

Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val Pro Thr Leu Lys Tyr
405 410 415

His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly Cys Arg
420 425

<210> 192

<211> 429

<212> PRT

<213> Homo sapiens

<400> 192

Met Cys Pro Gly Ala Leu Trp Val Ala Leu Pro Leu Leu Ser Leu Leu
1 5 10 15

Ala Gly Ser Leu Gln Gly Lys Pro Leu Gln Ser Trp Gly Arg Gly Ser
20 25 30

Ala Gly Gly Asn Ala His Ser Pro Leu Gly Val Pro Gly Gly Gly Leu
35 40 45

Pro Glu His Thr Phe Asn Leu Lys Met Phe Leu Glu Asn Val Lys Val
50 55 60

Asp Phe Leu Arg Ser Leu Asn Leu Ser Gly Val Pro Ser Gln Asp Lys
65 70 75 80

Thr Arg Val Glu Pro Pro Gln Tyr Met Ile Asp Leu Tyr Asn Arg Tyr
85 90 95

Thr Ser Asp Lys Ser Thr Thr Pro Ala Ser Asn Ile Val Arg Ser Phe
100 105 110

Ser Met Glu Asp Ala Ile Ser Ile Thr Ala Thr Glu Asp Phe Pro Phe
115 120 125

Gln Lys His Ile Leu Leu Phe Asn Ile Ser Ile Pro Arg His Glu Gln
130 135 140

Ile Thr Arg Ala Glu Leu Arg Leu Tyr Val Ser Cys Gln Asn His Val
145 150 155 160

Asp Pro Ser His Asp Leu Lys Gly Ser Val Val Ile Tyr Asp Val Leu
165 170 175

Asp Gly Thr Asp Ala Trp Asp Ser Ala Thr Glu Thr Lys Thr Phe Leu
180 185 190

Val Ser Gln Asp Ile Gln Asp Glu Gly Trp Glu Thr Leu Glu Val Ser
195 200 205

Ser Ala Val Lys Arg Trp Val Arg Ser Asp Ser Thr Lys Ser Lys Asn
 210 215 220
 Lys Leu Glu Val Thr Val Glu Ser His Arg Lys Gly Cys Asp Thr Leu
 225 230 235 240
 Asp Ile Ser Val Pro Pro Gly Ser Arg Asn Leu Pro Phe Phe Val Val
 245 250 255
 Phe Ser Asn Asp His Ser Ser Gly Thr Lys Glu Thr Arg Leu Glu Leu
 260 265 270
 Arg Glu Met Ile Ser His Glu Gln Glu Ser Val Leu Lys Lys Leu Ser
 275 280 285
 Lys Asp Gly Ser Thr Glu Ala Gly Glu Ser Ser His Glu Glu Asp Thr
 290 295 300
 Asp Gly His Val Ala Ala Gly Ser Thr Leu Ala Arg Arg Lys Arg Ser
 305 310 315 320
 Ala Gly Ala Gly Ser His Cys Gln Lys Thr Ser Leu Arg Val Asn Phe
 325 330 335
 Glu Asp Ile Gly Trp Asp Ser Trp Ile Ile Ala Pro Lys Glu Tyr Glu
 340 345 350
 Ala Tyr Glu Cys Lys Gly Gly Cys Phe Phe Pro Leu Ala Asp Asp Val
 355 360 365
 Thr Pro Thr Lys His Ala Ile Val Gln Thr Leu Val His Leu Lys Phe
 370 375 380
 Pro Thr Lys Val Gly Lys Ala Cys Cys Val Pro Thr Lys Leu Ser Pro
 385 390 395 400
 Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val Pro Thr Leu Lys Tyr
 405 410 415
 His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly Cys Arg
 420 425

<210> 193

<211> 165

<212> PRT

<213> Homo sapiens

<400> 193

Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
 1 5 10 15
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
 20 25 30
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
 35 40 45

Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
 50 55 60
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
 65 70 75 80
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
 85 90 95
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
 100 105 110
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
 115 120 125
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
 130 135 140
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
 145 150 155 160
 Leu Arg Ser Lys Glu
 165

<210> 194
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 194
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
 1 5 10 15
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
 20 25 30
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
 35 40 45
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
 50 55 60
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
 65 70 75 80
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
 85 90 95
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
 100 105 110
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
 115 120 125
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg

130		135		140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser				
145		150		155
				160
Leu Arg Ser Lys Glu				
		165		

<210> 195
 <211> 346
 <212> PRT
 <213> Homo sapiens

<400> 195
Met Asp Pro Ala Arg Lys Ala Gly Ala Gln Ala Met Ile Trp Thr Ala
1 5 10 15
Gly Trp Leu Leu Leu Leu Leu Arg Gly Gly Ala Gln Ala Leu Glu
20 25 30
Cys Tyr Ser Cys Val Gln Lys Ala Asp Asp Gly Cys Ser Pro Asn Lys
35 40 45
Met Lys Thr Val Lys Cys Ala Pro Gly Val Asp Val Cys Thr Glu Ala
50 55 60
Val Gly Ala Val Glu Thr Ile His Gly Gln Phe Ser Leu Ala Val Arg
65 70 75 80
Gly Cys Gly Ser Gly Leu Pro Gly Lys Asn Asp Arg Gly Leu Asp Leu
85 90 95
His Gly Leu Leu Ala Phe Ile Gln Leu Gln Gln Cys Ala Gln Asp Arg
100 105 110
Cys Asn Ala Lys Leu Asn Leu Thr Ser Arg Ala Leu Asp Pro Ala Gly
115 120 125
Asn Glu Ser Ala Tyr Pro Pro Asn Gly Val Glu Cys Tyr Ser Cys Val
130 135 140
Gly Leu Ser Arg Glu Ala Cys Gln Gly Thr Ser Pro Pro Val Val Ser
145 150 155 160
Cys Tyr Asn Ala Ser Asp His Val Tyr Lys Gly Cys Phe Asp Gly Asn
165 170 175
Val Thr Leu Thr Ala Ala Asn Val Thr Val Ser Leu Pro Val Arg Gly
180 185 190
Cys Val Gln Asp Glu Phe Cys Thr Arg Asp Gly Val Thr Gly Pro Gly
195 200 205
Phe Thr Leu Ser Gly Ser Cys Cys Gln Gly Ser Arg Cys Asn Ser Asp

210		215		220													
Leu	Arg	Asn	Lys	Thr	Tyr	Phe	Ser	Pro	Arg	Ile	Pro	Pro	Leu	Val	Arg		
225					230					235					240		
Leu	Pro	Pro	Pro	Glu	Pro	Thr	Thr	Val	Ala	Ser	Thr	Thr	Ser	Val	Thr		
				245					250					255			
Thr	Ser	Thr	Ser	Ala	Pro	Val	Arg	Pro	Thr	Ser	Thr	Thr	Lys	Pro	Met		
			260					265					270				
Pro	Ala	Pro	Thr	Ser	Gln	Thr	Pro	Arg	Gln	Gly	Val	Glu	His	Glu	Ala		
	275						280					285					
Ser	Arg	Asp	Glu	Glu	Pro	Arg	Leu	Thr	Gly	Gly	Ala	Ala	Gly	His	Gln		
290						295					300						
Asp	Arg	Ser	Asn	Ser	Gly	Gln	Tyr	Pro	Ala	Lys	Gly	Gly	Pro	Gln	Gln		
305					310					315					320		
Pro	His	Asn	Lys	Gly	Cys	Val	Ala	Pro	Thr	Ala	Gly	Leu	Ala	Ala	Leu		
				325					330					335			
Leu	Leu	Ala	Val	Ala	Ala	Gly	Val	Leu	Leu								
			340					345									

<210> 196
 <211> 346
 <212> PRT
 <213> Homo sapiens

<400> 196																	
Met	Asp	Pro	Ala	Arg	Lys	Ala	Gly	Ala	Gln	Ala	Met	Ile	Trp	Thr	Ala		
1				5					10					15			
Gly	Trp	Leu	Leu	Leu	Leu	Leu	Leu	Arg	Gly	Gly	Ala	Gln	Ala	Leu	Glu		
			20					25					30				
Cys	Tyr	Ser	Cys	Val	Gln	Lys	Ala	Asp	Asp	Gly	Cys	Ser	Pro	Asn	Lys		
		35					40					45					
Met	Lys	Thr	Val	Lys	Cys	Ala	Pro	Gly	Val	Asp	Val	Cys	Thr	Glu	Ala		
	50					55					60						
Val	Gly	Ala	Val	Glu	Thr	Ile	His	Gly	Gln	Phe	Ser	Leu	Ala	Val	Arg		
65					70					75					80		
Gly	Cys	Gly	Ser	Gly	Leu	Pro	Gly	Lys	Asn	Asp	Arg	Gly	Leu	Asp	Leu		
				85					90					95			
His	Gly	Leu	Leu	Ala	Phe	Ile	Gln	Leu	Gln	Gln	Cys	Ala	Gln	Asp	Arg		
			100					105					110				
Cys	Asn	Ala	Lys	Leu	Asn	Leu	Thr	Ser	Arg	Ala	Leu	Asp	Pro	Ala	Gly		

115					120					125					
Asn	Glu	Ser	Ala	Tyr	Pro	Pro	Asn	Gly	Val	Glu	Cys	Tyr	Ser	Cys	Val
130						135					140				
Gly	Leu	Ser	Arg	Glu	Ala	Cys	Gln	Gly	Thr	Ser	Pro	Pro	Val	Val	Ser
145					150					155					160
Cys	Tyr	Asn	Ala	Ser	Asp	His	Val	Tyr	Lys	Gly	Cys	Phe	Asp	Gly	Asn
				165					170					175	
Val	Thr	Leu	Thr	Ala	Ala	Asn	Val	Thr	Val	Ser	Leu	Pro	Val	Arg	Gly
			180					185					190		
Cys	Val	Gln	Asp	Glu	Phe	Cys	Thr	Arg	Asp	Gly	Val	Thr	Gly	Pro	Gly
		195					200					205			
Phe	Thr	Leu	Ser	Gly	Ser	Cys	Cys	Gln	Gly	Ser	Arg	Cys	Asn	Ser	Asp
	210					215					220				
Leu	Arg	Asn	Lys	Thr	Tyr	Phe	Ser	Pro	Arg	Ile	Pro	Pro	Leu	Val	Arg
225					230					235					240
Leu	Pro	Pro	Pro	Glu	Pro	Thr	Thr	Val	Ala	Ser	Thr	Thr	Ser	Val	Thr
				245					250					255	
Thr	Ser	Thr	Ser	Ala	Pro	Val	Arg	Pro	Thr	Ser	Thr	Thr	Lys	Pro	Met
			260					265					270		
Pro	Ala	Pro	Thr	Ser	Gln	Thr	Pro	Arg	Gln	Gly	Val	Glu	His	Glu	Ala
		275					280					285			
Ser	Arg	Asp	Glu	Glu	Pro	Arg	Leu	Thr	Gly	Gly	Ala	Ala	Gly	His	Gln
	290					295					300				
Asp	Arg	Ser	Asn	Ser	Gly	Gln	Tyr	Pro	Ala	Lys	Gly	Gly	Pro	Gln	Gln
305					310					315					320
Pro	His	Asn	Lys	Gly	Cys	Val	Ala	Pro	Thr	Ala	Gly	Leu	Ala	Ala	Leu
				325					330					335	
Leu	Leu	Ala	Val	Ala	Ala	Gly	Val	Leu	Leu						
			340					345							

<210> 197

<211> 165

<212> PRT

<213> Homo sapiens

<400> 197

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	

Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		

Arg Arg Asp Phe Pro Glu Glu Val Ala Ile Val Glu Glu Leu Gly Arg
 130 135 140
 Arg His Ala Asp Gly Ser Phe Ser Asp Glu Met Asn Thr Ile Leu Asp
 145 150 155 160
 Asn Leu Ala Ala Arg Asp Phe Ile Asn Trp Leu Ile Gln Thr Lys Ile
 165 170 175
 Thr Asp Arg Lys
 180

<210> 199
 <211> 180
 <212> PRT
 <213> Homo sapiens

<400> 199
 Met Lys Ser Ile Tyr Phe Val Ala Gly Leu Phe Val Met Leu Val Gln
 1 5 10 15
 Gly Ser Trp Gln Arg Ser Leu Gln Asp Thr Glu Glu Lys Ser Arg Ser
 20 25 30
 Phe Ser Ala Ser Gln Ala Asp Pro Leu Ser Asp Pro Asp Gln Met Asn
 35 40 45
 Glu Asp Lys Arg His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys
 50 55 60
 Tyr Leu Asp Ser Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn
 65 70 75 80
 Thr Lys Arg Asn Arg Asn Asn Ile Ala Lys Arg His Asp Glu Phe Glu
 85 90 95
 Arg His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu
 100 105 110
 Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
 115 120 125
 Arg Arg Asp Phe Pro Glu Glu Val Ala Ile Val Glu Glu Leu Gly Arg
 130 135 140
 Arg His Ala Asp Gly Ser Phe Ser Asp Glu Met Asn Thr Ile Leu Asp
 145 150 155 160
 Asn Leu Ala Ala Arg Asp Phe Ile Asn Trp Leu Ile Gln Thr Lys Ile
 165 170 175
 Thr Asp Arg Lys
 180

<210> 200
 <211> 180
 <212> PRT
 <213> Homo sapiens

<400> 200
 Met Lys Ser Ile Tyr Phe Val Ala Gly Leu Phe Val Met Leu Val Gln
 1 5 10 15
 Gly Ser Trp Gln Arg Ser Leu Gln Asp Thr Glu Glu Lys Ser Arg Ser
 20 25 30
 Phe Ser Ala Ser Gln Ala Asp Pro Leu Ser Asp Pro Asp Gln Met Asn
 35 40 45
 Glu Asp Lys Arg His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys
 50 55 60
 Tyr Leu Asp Ser Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn
 65 70 75 80
 Thr Lys Arg Asn Arg Asn Asn Ile Ala Lys Arg His Asp Glu Phe Glu
 85 90 95
 Arg His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu
 100 105 110
 Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
 115 120 125
 Arg Arg Asp Phe Pro Glu Glu Val Ala Ile Val Glu Glu Leu Gly Arg
 130 135 140
 Arg His Ala Asp Gly Ser Phe Ser Asp Glu Met Asn Thr Ile Leu Asp
 145 150 155 160
 Asn Leu Ala Ala Arg Asp Phe Ile Asn Trp Leu Ile Gln Thr Lys Ile
 165 170 175
 Thr Asp Arg Lys
 180

<210> 201
 <211> 180
 <212> PRT
 <213> Homo sapiens

<400> 201
 Met Lys Ser Ile Tyr Phe Val Ala Gly Leu Phe Val Met Leu Val Gln
 1 5 10 15
 Gly Ser Trp Gln Arg Ser Leu Gln Asp Thr Glu Glu Lys Ser Arg Ser
 20 25 30

Phe Ser Ala Ser Gln Ala Asp Pro Leu Ser Asp Pro Asp Gln Met Asn
 35 40 45
 Glu Asp Lys Arg His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys
 50 55 60
 Tyr Leu Asp Ser Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn
 65 70 75 80
 Thr Lys Arg Asn Arg Asn Asn Ile Ala Lys Arg His Asp Glu Phe Glu
 85 90 95
 Arg His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu
 100 105 110
 Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
 115 120 125
 Arg Arg Asp Phe Pro Glu Glu Val Ala Ile Val Glu Glu Leu Gly Arg
 130 135 140
 Arg His Ala Asp Gly Ser Phe Ser Asp Glu Met Asn Thr Ile Leu Asp
 145 150 155 160
 Asn Leu Ala Ala Arg Asp Phe Ile Asn Trp Leu Ile Gln Thr Lys Ile
 165 170 175
 Thr Asp Arg Lys
 180

<210> 202
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 202
 Met Lys Ile Ile Leu Trp Leu Cys Val Phe Gly Leu Phe Leu Ala Thr
 1 5 10 15
 Leu Phe Pro Ile Ser Trp Gln Met Pro Val Glu Ser Gly Leu Ser Ser
 20 25 30
 Glu Asp Ser Ala Ser Ser Glu Ser Phe Ala Ser Lys Ile Lys Arg His
 35 40 45
 Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu Glu
 50 55 60
 Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser Ser
 65 70 75 80
 Gly Ala Pro Pro Pro Ser Gly
 85

<210> 203

<211> 87
 <212> PRT
 <213> Homo sapiens

<400> 203
 Met Lys Ile Ile Leu Trp Leu Cys Val Phe Gly Leu Phe Leu Ala Thr
 1 5 10 15
 Leu Phe Pro Ile Ser Trp Gln Met Pro Val Glu Ser Gly Leu Ser Ser
 20 25 30
 Glu Asp Ser Ala Ser Ser Glu Ser Phe Ala Ser Lys Ile Lys Arg His
 35 40 45
 Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu Glu
 50 55 60
 Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser Ser
 65 70 75 80
 Gly Ala Pro Pro Pro Ser Gly
 85

<210> 204
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 204
 Ser Ala Gly Ala Gly Ser His Cys Gln Lys Thr Ser Leu Arg Val Asn
 1 5 10 15
 Phe Glu Asp Ile Gly Trp Asp Ser Trp Ile Ile Ala Pro Lys Glu Tyr
 20 25 30
 Glu Ala Tyr Glu Cys Lys Gly Gly Cys Phe Phe Pro Leu Ala Asp Asp
 35 40 45
 Val Thr Pro Thr Lys His Ala Ile Val Gln Thr Leu Val His Leu Lys
 50 55 60
 Phe Pro Thr Lys Val Gly Lys Ala Cys Cys Val Pro Thr Lys Leu Ser
 65 70 75 80
 Pro Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val Pro Thr Leu Lys
 85 90 95
 Tyr His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly Cys Arg
 100 105 110

<210> 205
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 205

Met	Arg	Thr	Pro	Gly	Pro	Leu	Pro	Val	Leu	Leu	Leu	Leu	Leu	Ala	Gly
1				5					10					15	
Ala	Pro	Ala	Ala	Arg	Pro	Thr	Pro	Pro	Thr	Cys	Tyr	Ser	Arg	Met	Arg
			20					25					30		
Ala	Leu	Ser	Gln	Glu	Ile	Thr	Arg	Asp	Phe	Asn	Leu	Leu	Gln	Val	Ser
		35					40					45			
Glu	Pro	Ser	Glu	Pro	Cys	Val	Arg	Tyr	Leu	Pro	Arg	Leu	Tyr	Leu	Asp
	50					55					60				
Ile	His	Asn	Tyr	Cys	Val	Leu	Asp	Lys	Leu	Arg	Asp	Phe	Val	Ala	Ser
65					70					75					80
Pro	Pro	Cys	Trp	Lys	Val	Ala	Gln	Val	Asp	Ser	Leu	Lys	Asp	Lys	Ala
				85					90					95	
Arg	Lys	Leu	Tyr	Thr	Ile	Met	Asn	Ser	Phe	Cys	Arg	Arg	Asp	Leu	Val
			100					105					110		
Phe	Leu	Leu	Asp	Asp	Cys	Asn	Ala	Leu	Glu	Tyr	Pro	Ile	Pro	Val	Thr
	115						120					125			
Thr	Val	Leu	Pro	Asp	Arg	Gln	Arg								
	130					135									

<210> 206

<211> 136

<212> PRT

<213> Homo sapiens

<400> 206

Met	Arg	Thr	Pro	Gly	Pro	Leu	Pro	Val	Leu	Leu	Leu	Leu	Leu	Ala	Gly
1				5					10					15	
Ala	Pro	Ala	Ala	Arg	Pro	Thr	Pro	Pro	Thr	Cys	Tyr	Ser	Arg	Met	Arg
			20					25					30		
Ala	Leu	Ser	Gln	Glu	Ile	Thr	Arg	Asp	Phe	Asn	Leu	Leu	Gln	Val	Ser
		35					40					45			
Glu	Pro	Ser	Glu	Pro	Cys	Val	Arg	Tyr	Leu	Pro	Arg	Leu	Tyr	Leu	Asp
	50					55					60				
Ile	His	Asn	Tyr	Cys	Val	Leu	Asp	Lys	Leu	Arg	Asp	Phe	Val	Ala	Ser
65					70					75					80
Pro	Pro	Cys	Trp	Lys	Val	Ala	Gln	Val	Asp	Ser	Leu	Lys	Asp	Lys	Ala
				85					90					95	
Arg	Lys	Leu	Tyr	Thr	Ile	Met	Asn	Ser	Phe	Cys	Arg	Arg	Asp	Leu	Val
			100					105					110		
Phe	Leu	Leu	Asp	Asp	Cys	Asn	Ala	Leu	Glu	Tyr	Pro	Ile	Pro	Val	Thr
	115						120					125			

Thr Val Leu Pro Asp Arg Gln Arg
 130 135

<210> 207
 <211> 187
 <212> PRT
 <213> Homo sapiens

<400> 207
 Met Thr Asn Lys Cys Leu Leu Gln Ile Ala Leu Leu Leu Cys Phe Ser
 1 5 10 15
 Thr Thr Ala Leu Ser Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg
 20 25 30
 Ser Ser Asn Phe Gln Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg
 35 40 45
 Leu Glu Tyr Cys Leu Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu
 50 55 60
 Ile Lys Gln Leu Gln Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile
 65 70 75 80
 Tyr Glu Met Leu Gln Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser
 85 90 95
 Ser Thr Gly Trp Asn Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val
 100 105 110
 Tyr His Gln Ile Asn His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu
 115 120 125
 Lys Glu Asp Phe Thr Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys
 130 135 140
 Arg Tyr Tyr Gly Arg Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser
 145 150 155 160
 His Cys Ala Trp Thr Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr
 165 170 175
 Phe Ile Asn Arg Leu Thr Gly Tyr Leu Arg Asn
 180 185

<210> 208
 <211> 44
 <212> DNA
 <213> Homo sapiens

<400> 208
 gagcgcggat ccgccttagg cgtggcagaa acacccacct accc

<210> 209
 <211> 38
 <212> DNA
 <213> Homo sapiens

 <400> 209
 cggcgcgcgcg ccgcttagtg cacagggagg aagcgctc 38

 <210> 210
 <211> 27
 <212> DNA
 <213> Homo sapiens

 <400> 210
 ggccggctcg aggttgctga aacacca 27

 <210> 211
 <211> 53
 <212> DNA
 <213> Homo sapiens

 <400> 211
 gcgcgcgcgcg ccgcttattc tctaacagat ctttccaaac caggcattct agc 53

 <210> 212
 <211> 27
 <212> DNA
 <213> Homo sapiens

 <400> 212
 ggccggctcg aggttgctga aacacca 27

 <210> 213
 <211> 35
 <212> DNA
 <213> Homo sapiens

 <400> 213
 gcgcgcgcgcg ccgcttataa accaggcatt ctagc 35

 <210> 214
 <211> 27
 <212> DNA
 <213> Homo sapiens

 <400> 214
 ggccggctcg aggttgctga aacacca 27

 <210> 215
 <211> 37
 <212> DNA
 <213> Homo sapiens

 <400> 215
 gcgcgcgcgcg ggccgcttat ctagcaactc tcaaagc 37

<210> 216
 <211> 38
 <212> DNA
 <213> Homo sapiens

 <400> 216
 gctagtcctt aggccttagtt gctgaaacac caacttac 38

 <210> 217
 <211> 37
 <212> DNA
 <213> Homo sapiens

 <400> 217
 gtcagcctcg agcggccgcg atccgtgtgg aagaacg 37

 <210> 218
 <211> 89
 <212> DNA
 <213> Homo sapiens

 <400> 218
 cgtagcaagc tttatttccc ttctttttct ctttagctcg gcttattcca ggagcttgga 60
 taaaagagtt gctgaaacac caacttacc 89

 <210> 219
 <211> 23
 <212> DNA
 <213> Homo sapiens

 <400> 219
 gcttattata agcctaaggc agc 23

 <210> 220
 <211> 32
 <212> DNA
 <213> Homo sapiens

 <400> 220
 ggatccgccca tcatgagggc gctggagggg cc 32

 <210> 221
 <211> 41
 <212> DNA
 <213> Homo sapiens

 <400> 221
 gtcgtcggta ccttataagc ctaaggcagc ttgacttgca g 41

 <210> 222
 <211> 50
 <212> DNA
 <213> Homo sapiens

 <400> 222
 gactggatcc gccatcatga agtgggtaac ctttatttcc cttctttttc 50

<210> 223
 <211> 45
 <212> DNA
 <213> Homo sapiens

 <400> 223
 cggtgccggt gcgcggccgc ttagtgaca ggcaggaagc gttcc 45

 <210> 224
 <211> 39
 <212> DNA
 <213> Homo sapiens

 <400> 224
 gaacaatgtc aaccacatag acaatgtact gctttgggt 39

 <210> 225
 <211> 21
 <212> DNA
 <213> Homo sapiens

 <400> 225
 gatagtcttc tgcacagggc a 21

 <210> 226
 <211> 38
 <212> DNA
 <213> Homo sapiens

 <400> 226
 gctagtcctt aggcttagtt gctgaaacac caacttac 38

 <210> 227
 <211> 36
 <212> DNA
 <213> Homo sapiens

 <400> 227
 ggggtacctt attagtgaac tggcaaaaat ctttct 36

 <210> 228
 <211> 42
 <212> DNA
 <213> Homo sapiens

 <400> 228
 ggccggctcg aggatgacga tgacaagctg gattgcaacc tg 42

 <210> 229
 <211> 35
 <212> DNA
 <213> Homo sapiens

 <400> 229
 gcgcgcgcg ccgcttaca accaggcatt ctagc 35

<210> 230
 <211> 42
 <212> DNA
 <213> Homo sapiens

 <400> 230
 ggccggctcg aggatgacga tgacaagctg gattgcaacc tg 42

 <210> 231
 <211> 37
 <212> DNA
 <213> Homo sapiens

 <400> 231
 gcgcgcgcgc ggccgcttat ctagcaactc tcaaagc 37

 <210> 232
 <211> 27
 <212> DNA
 <213> Homo sapiens

 <400> 232
 ggccggctcg aggttgctga aacacca 27

 <210> 233
 <211> 35
 <212> DNA
 <213> Homo sapiens

 <400> 233
 gcgcgcgcgg ccgcttactc acggacgctc cgctc 35

 <210> 234
 <211> 41
 <212> DNA
 <213> Homo sapiens

 <400> 234
 aggagcgtcg acaaaagatt gcccgcccag gtggcattta c 41

 <210> 235
 <211> 57
 <212> DNA
 <213> Homo sapiens

 <400> 235
 ctttaaactcg atgagcaacc tcactcttgt gtgcatcgtc gccagtgctc ccttcag 57

 <210> 236
 <211> 40
 <212> DNA
 <213> Homo sapiens

 <400> 236
 cgcgcgcgtc gacaaaagaa tgagctacaa cttgcttgga 40

<210> 237
 <211> 55
 <212> DNA
 <213> Homo sapiens

 <400> 237
 gcgcgcatcg atgagcaacc tcactcttgt gtgcatcggt tcggaggtaa cctgt 55

 <210> 238
 <211> 40
 <212> DNA
 <213> Homo sapiens

 <400> 238
 aagctgcctt aggcttattg cccgcccagg tggcatttac 40

 <210> 239
 <211> 43
 <212> DNA
 <213> Homo sapiens

 <400> 239
 gcgcgcggcc ggccgtacc ttagtcgcca gtgctccctt cag 43

 <210> 240
 <211> 38
 <212> DNA
 <213> Homo sapiens

 <400> 240
 atgacgcccg gggccaccat gaagtgggta acctttat 38

 <210> 241
 <211> 32
 <212> DNA
 <213> Homo sapiens

 <400> 241
 gcctatgaat tcttagtgca caggcaggaa gc 32

 <210> 242
 <211> 40
 <212> DNA
 <213> Homo sapiens

 <400> 242
 acgagtcccg gggccaccat gagggcgctg gaggggccag 40

 <210> 243
 <211> 33
 <212> DNA
 <213> Homo sapiens

 <400> 243

agctgcgaat tcttataagc ctaaggcagc ttg 33

<210> 244
 <211> 43
 <212> DNA
 <213> Homo sapiens

<400> 244
 cagtcaggat ccgaattccg ccaccatgag ggcgctggag ggg 43

<210> 245
 <211> 55
 <212> DNA
 <213> Homo sapiens

<400> 245
 cttttaaactg atgagcaacc tcactcttgt gtgcatcgtg cacaggcagg aagcg 55

<210> 246
 <211> 43
 <212> DNA
 <213> Homo sapiens

<400> 246
 gtcaagctgc cttaggctta gtggctgaaa cacctacata tcc 43

<210> 247
 <211> 45
 <212> DNA
 <213> Homo sapiens

<400> 247
 cggtgccggt gcgcggccgc ttagtgaca ggcaggaagc gttcc 45

<210> 248
 <211> 69
 <212> DNA
 <213> Homo sapiens

<400> 248
 aggagcgtcg acaaaagaga gggatgata ttgcactgta agccacaaaag acaatctcca 60
 tggatgaag 69

<210> 249
 <211> 91
 <212> DNA
 <213> Homo sapiens

<400> 249
 cttttaaactg atgagcaacc tcactcttgt gtgcatcacc accaccttct ggatccaagt 60
 gttgacactt catccatgga gattgtcttt g 91

<210> 250
 <211> 67

<212> DNA
 <213> Homo sapiens

 <400> 250
 aagctgcctt aggcttaggt gatgatgatg attgtggttg gattggtttc gctaacttcc 60
 acttgtg 67

 <210> 251
 <211> 68
 <212> DNA
 <213> Homo sapiens

 <400> 251
 gcgcgcggcg cgccttaacc accaccttct ggatcacctg gcaaacacaa gtggaagtta 60
 gcgaaacc 68

 <210> 252
 <211> 60
 <212> DNA
 <213> Homo sapiens

 <400> 252
 aggagcgtcg acaaaagggg tgatgatgat gattgtggtt ggattggttt cgctaacttc 60

 <210> 253
 <211> 97
 <212> DNA
 <213> Homo sapiens

 <400> 253
 ctttaaactcg atgagcaacc tcactcttgt gtgcatcacc accaccttct ggatcacctg 60
 gcaaacacaa gtggaagtta gcgaaaccaa tccaacc 97

 <210> 254
 <211> 65
 <212> DNA
 <213> Homo sapiens

 <400> 254
 aagctgcctt aggcttaggt gatgatgatg attgtggttg gattggtttc gctaacttcc 60
 acttg 65

 <210> 255
 <211> 72
 <212> DNA
 <213> Homo sapiens

 <400> 255
 gcgcgcggcg cgccttaacc accaccttct ggatcacctg gcaaacacaa gtggaagtta 60
 gcgaaaccaa tc 72

 <210> 256
 <211> 106
 <212> DNA
 <213> Homo sapiens

 <400> 256

gcgcggatcc gaattccgcc gccatgacca acaagtgtct cctccaaatt gctctcctgt 60
 tgtgtcttctc cactacagct ctttccatga gctacaactt gcttgg 106

<210> 257
 <211> 55
 <212> DNA
 <213> Homo sapiens

<400> 257
 gcgcgcatcg atgagcaacc tcactcttgt gtgcatcggt tcggaggtaa cctgt 55

<210> 258
 <211> 32
 <212> DNA
 <213> Homo sapiens

<400> 258
 cgcgcatccg ccaccatgca ttggggaacc ct 32

<210> 259
 <211> 50
 <212> DNA
 <213> Homo sapiens

<400> 259
 ccatcgatga gcaacctcac tcttgtgtgc atcgcaccca gggctgaggt 50

<210> 260
 <211> 33
 <212> DNA
 <213> Homo sapiens

<400> 260
 aagctgcctt aggcttagtg cccatccaaa aag 33

<210> 261
 <211> 28
 <212> DNA
 <213> Homo sapiens

<400> 261
 ggggtacctt agcaccaggt gctgaggt 28

<210> 262
 <211> 35
 <212> DNA
 <213> Homo sapiens

<400> 262
 aggagcgtcg acaaaagagt gcccatccaa aaagt 35

<210> 263
 <211> 53
 <212> DNA

<213> Homo sapiens
 <400> 263
 cgcgcatcga tgagcaacct cactcttgtg tgcacgcac ccagggtga ggt 53
 <210> 264
 <211> 33
 <212> DNA
 <213> Homo sapiens
 <400> 264
 aagctgcctt aggcttagtg cccatccaaa aag 33
 <210> 265
 <211> 30
 <212> DNA
 <213> Homo sapiens
 <400> 265
 ttggcgcgcc ttagcaccca gggctgaggt 30
 <210> 266
 <211> 41
 <212> DNA
 <213> Homo sapiens
 <400> 266
 cgcgcgctc gacaaaagat gtgatctgcc tcaaaccac a 41
 <210> 267
 <211> 59
 <212> DNA
 <213> Homo sapiens
 <400> 267
 gcgcgcacg atgagcaacc tcactcttgt gtgcacctc cttacttctt aaactttct 59
 <210> 268
 <211> 83
 <212> DNA
 <213> Homo sapiens
 <400> 268
 gtcaagctgc cttaggctta ttcgttaacc aacacttggt tggttctcac ttggttgaag 60
 ctttgtactt ggtttgtggt gaa 83
 <210> 269
 <211> 69
 <212> DNA
 <213> Homo sapiens
 <400> 269
 atcgcatatg gcgcgcccta ttagttacag tagttttcca attggtacaa agaacaaata 60
 gaagtacaa 69
 <210> 270

<211> 44
 <212> DNA
 <213> Homo sapiens

 <400> 270
 aggagcgtcg acaaaagaac agaagagact ataaaatttg ctgc 44

 <210> 271
 <211> 84
 <212> DNA
 <213> Homo sapiens

 <400> 271
 tccaggagcgcg tcgacaaaag attcggttaac caacacttgt gtggttctca cttgggttgaa 60
 gctttgtact tggtttgtgg tgaa 84

 <210> 272
 <211> 86
 <212> DNA
 <213> Homo sapiens

 <400> 272
 agacttttaaa tcgatgagca acctcactct tgtgtgcatc gttacagtag ttttccaatt 60
 ggtacaaaga acaaatagaa gtacaa 86

 <210> 273
 <211> 83
 <212> DNA
 <213> Homo sapiens

 <400> 273
 gtcaagctgc cttaggctta ttcgttaacc aacacttgtg tggttctcac ttgggttgaa 60
 ctttgtactt ggtttgtggg gaa 83

 <210> 274
 <211> 69
 <212> DNA
 <213> Homo sapiens

 <400> 274
 atcgcatatg gcgcgcccta ttagttacag tagttttcca attggtacaa agaacaaata 60
 gaagtacaa 69

 <210> 275
 <211> 84
 <212> DNA
 <213> Homo sapiens

 <400> 275
 tccaggagcgcg tcgacaaaag attcggttaac caacacttgt gtggttctca cttgggttgaa 60
 gctttgtact tggtttgtgg tgaa 84

 <210> 276
 <211> 86
 <212> DNA

<213> Homo sapiens

<400> 276

agacttttaaa tcgatgagca acctcactct tgtgtgcatc gttacagtag ttttccaatt 60
ggtacaaaga acaaataga gtacaa 86

<210> 277

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Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu
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Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu
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Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro
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Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu
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Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His
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Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala
				165					170					175	
Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser
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Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu
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Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys
225					230					235					240
Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp
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Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser
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 Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser
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 325 330 335
 Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr
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 Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu
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 Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro
 370 375 380
 Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu
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 Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro
 405 410 415
 Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys
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 Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys
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 Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His
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 Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser
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 Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp
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<222> (31)

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<223> n equals a,t,g, or c

<220>

<221> misc_feature

<222> (32)

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<220>

<221> misc_feature

<222> (33)

<223> n equals a,t,g, or c

<400> 336

aggagcgtcg acaaaagann nnnnnnnnnn nnn

33

<210> 337

<211> 52

<212> DNA

<213> Artificial Sequence

<220>

<221> primer_bind

<223> reverse primer useful for generation of albumin
fusion protein in which the albumin moiety is c-terminal of
the Therapeutic Protein

<220>

<221> misc_feature

<222> (38)

<223> n equals a,t,g, or c

<220>

<221> misc_feature

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<220>

<221> misc_feature

<222> (40)

<223> n equals a,t,g, or c

<220>

<221> misc_feature

<222> (41)

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<220>

<221> misc_feature

<222> (42)

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<220>

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<222> (43)

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<220>
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<220>
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<220>
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<220>
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<220>
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<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (52)
<223> n equals a,t,g, or c

<400> 337
ctttaaatcg atgagcaacc tcactcttgt gtgcacnnnn nnnnnnnnnn nn

52

<210> 338
<211> 46
<212> DNA
<213> Artificial Sequence

<220>
<221> primer_bind

<223> forward primer useful for inserting Therapeutic protein into pC4:HSA vector

<220>

<221> misc_feature

<222> (29)

<223> n equals a,t,g, or c

<220>

<221> misc_feature

<222> (30)

<223> n equals a,t,g, or c

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<221> misc_feature

<222> (31)

<223> n equals a,t,g, or c

<220>

<221> misc_feature

<222> (32)

<223> n equals a,t,g, or c

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<221> misc_feature

<222> (33)

<223> n equals a,t,g, or c

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<221> misc_feature

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<220>

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<223> n equals a,t,g, or c

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<222> (37)

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<220>

<221> misc_feature

<222> (38)

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<220>

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<222> (39)

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<222> (45)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (46)
<223> n equals a,t,g, or c

<400> 338
ccgccgctcg aggggtgtgt ttcgtcgann nnnnnnnnnn nnnnnn

46

<210> 339
<211> 55
<212> DNA
<213> Artificial Sequence

<220>
<221> primer_bind
<223> reverse primer useful for inserting Therapeutic
protein into pC4:HSA vector

<220>
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<222> (38)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (39)

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<223> n equals a,t,g, or c

<220>
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<222> (41)
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<220>
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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<222> (46)
<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (49)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (50)
<223> n equals a,t,g, or c

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<220>
<221> misc_feature
<222> (51)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (52)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (53)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (54)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (55)
<223> n equals a,t,g, or c

<400> 339
agtcccatcg atgagcaacc tcactcttgt gtgcatcnnn nnnnnnnnnn nnnnn 55

<210> 340
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> signal
<223> Stanniocalcin signal peptide

<400> 340
Met Leu Gln Asn Ser Ala Val Leu Leu Leu Leu Val Ile Ser Ala Ser
1 5 10 15

Ala

<210> 341
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<221> signal
<223> Synthetic signal peptide

<400> 341
Met Pro Thr Trp Ala Trp Trp Leu Phe Leu Val Leu Leu Leu Ala Leu
1 5 10 15

Trp Ala Pro Ala Arg Gly

<210> 342
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> primer_bind
 <223> Degenerate VH forward primer useful for
 amplifying human VH domains

<400> 342
 caggtgcagc tgggtgcagtc tgg 23

<210> 343
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> primer_bind
 <223> Degenerate VH forward primer useful for
 amplifying human VH domains

<400> 343
 caggtcaact taagggagtc tgg 23

<210> 344
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> primer_bind
 <223> Degenerate VH forward primer useful for
 amplifying human VH domains

<400> 344
 gaggtgcagc tgggtggagtc tgg 23

<210> 345
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> primer_bind
 <223> Degenerate VH forward primer useful for
 amplifying human VH domains

<400> 345
 caggtgcagc tgcaggagtc ggg 23

<210> 346

<211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate VH forward primer useful for
 amplifying human VH domains

 <400> 346
 gaggtgcagc tgttgcagtc tgc 23

 <210> 347
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate VH forward primer useful for
 amplifying human VH domains

 <400> 347
 caggtacagc tgcagcagtc agg 23

 <210> 348
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate JH reverse primer useful for
 amplifying human VH domains

 <400> 348
 tgaggagacg gtgaccaggg tgcc 24

 <210> 349
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate JH reverse primer useful for
 amplifying human VH domains

 <400> 349
 tgaagagacg gtgaccattg tccc 24

 <210> 350
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> primer_bind
 <223> Degenerate JH reverse primer useful for
 amplifying human VH domains

 <400> 350
 tgaggagacg gtgaccaggg ttcc 24

 <210> 351
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate JH reverse primer useful for
 amplifying human VH domains

 <400> 351
 tgaggagacg gtgaccgtgg tccc 24

 <210> 352
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate Vkappa forward primer useful for
 amplifying human VL domains

 <400> 352
 gacatccaga tgacccagtc tcc 23

 <210> 353
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate Vkappa forward primer useful for
 amplifying human VL domains

 <400> 353
 gatgttgatga tgactcagtc tcc 23

 <210> 354
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate Vkappa forward primer useful for
 amplifying human VL domains

<400> 354
 gatattgtga tgactcagtc tcc 23

 <210> 355
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate Vkappa forward primer useful for
 amplifying human VL domains

 <400> 355
 gaaattgtgt tgacgcagtc tcc 23

 <210> 356
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate Vkappa forward primer useful for
 amplifying human VL domains

 <400> 356
 gacatcgtga tgacccagtc tcc 23

 <210> 357
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate Vkappa forward primer useful for
 amplifying human VL domains

 <400> 357
 gaaacgacac tcacgcagtc tcc 23

 <210> 358
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate Vkappa forward primer useful for
 amplifying human VL domains

 <400> 358
 gaaattgtgc tgactcagtc tcc 23

 <210> 359
 <211> 23

<212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate Vlambda forward primer useful for
 amplifying human VL domains

 <400> 359
 cagtctgtgt tgacgcagcc gcc 23

 <210> 360
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate Vlambda forward primer useful for
 amplifying human VL domains

 <400> 360
 cagtctgccc tgactcagcc tgc 23

 <210> 361
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate Vlambda forward primer useful for
 amplifying human VL domains

 <400> 361
 tcctatgtgc tgactcagcc acc 23

 <210> 362
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate Vlambda forward primer useful for
 amplifying human VL domains

 <400> 362
 tcttctgagc tgactcagga ccc 23

 <210> 363
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind

<223> Degenerate Vlamba forward primer useful for
amplifying human VL domains

<400> 363
cacgttatac tgactcaacc gcc . 23

<210> 364
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221> primer_bind
<223> Degenerate Vlamba forward primer useful for
amplifying human VL domains

<400> 364
caggctgtgc tcaactcagcc gtc 23

<210> 365
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221> primer_bind
<223> Degenerate Vlamba forward primer useful for
amplifying human VL domains

<400> 365
aattttatgc tgactcagcc cca 23

<210> 366
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> primer_bind
<223> Degenerate Jkappa reverse primer useful for
amplifying human VL domains

<400> 366
acgtttgatt tccaccttgg tccc 24

<210> 367
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> primer_bind
<223> Degenerate Jkappa reverse primer useful for
amplifying human VL domains

<400> 367
acgtttgatc tccagcttgg tccc 24

<210> 368
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate Jkappa reverse primer useful for
 amplifying human VL domains

 <400> 368
 acgttttgata tccacttttg tccc 24

 <210> 369
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate Jkappa reverse primer useful for
 amplifying human VL domains

 <400> 369
 acgtttgatc tccaccttg tccc 24

 <210> 370
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate Jkappa reverse primer useful for
 amplifying human VL domains

 <400> 370
 acgtttaatc tccagtcgtg tccc 24

 <210> 371
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <221> primer_bind
 <223> Degenerate Jlambda reverse primer useful for
 amplifying human VL domains

 <400> 371
 cagtctgtgt tgacgcagcc gcc 23

 <210> 372
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> primer_bind
 <223> Degenerate Jlambda reverse primer useful for
 amplifying human VL domains

<400> 372
 cagtctgccc tgactcagcc tgc 23

<210> 373
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> primer_bind
 <223> Degenerate Jlambda reverse primer useful for
 amplifying human VL domains

<400> 373
 tcctatgtgc tgactcagcc acc 23

<210> 374
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> primer_bind
 <223> Degenerate Jlambda reverse primer useful for
 amplifying human VL domains

<400> 374
 tcttctgagc tgactcagga ccc 23

<210> 375
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> primer_bind
 <223> Degenerate Jlambda reverse primer useful for
 amplifying human VL domains

<400> 375
 cacgttatac tgactcaacc gcc 23

<210> 376
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> primer_bind
 <223> Degenerate Jlambda reverse primer useful for
 amplifying human VL domains

<400> 376
 caggctgtgc tcactcagcc gtc 23

<210> 377
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> primer_bind
 <223> Degenerate Jlambda reverse primer useful for
 amplifying human VL domains

<400> 377
 aattttatgc tgactcagcc cca 23

<210> 378
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> turn
 <223> Linker peptide that may be used to join VH
 and VL domains in an scFv.

<400> 378
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 1 5 10 15

<210> 379
 <211> 609
 <212> PRT
 <213> Homo sapiens

<400> 379
 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30
 His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45
 Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60
 Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
 65 70 75 80
 Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
 85 90 95

Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
 100 105 110
 Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
 115 120 125
 His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
 130 135 140
 Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
 145 150 155 160
 Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
 165 170 175
 Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
 180 185 190
 Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu
 195 200 205
 Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys
 210 215 220
 Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val
 225 230 235 240
 Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser
 245 250 255
 Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly
 260 265 270
 Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile
 275 280 285
 Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu
 290 295 300
 Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp
 305 310 315 320
 Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser
 325 330 335
 Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly
 340 345 350
 Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val
 355 360 365
 Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 370 375 380
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 385 390 395 400

Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
405 410 415
Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
420 425 430
Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
435 440 445
Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
450 455 460
Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
465 470 475 480
Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
485 490 495
Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
500 505 510
Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
515 520 525
Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
530 535 540
Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
545 550 555 560
Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
565 570 575
Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
580 585 590
Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
595 600 605

Leu

<210> 380
<211> 19
<212> PRT
<213> Homo sapiens

<400> 380
Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
1 5 10 15

Val His Ser

<210> 381
<211> 29

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<212> PRT
<213> Homo sapiens

<400> 381
Met Glu Arg Ala Ala Pro Ser Arg Arg Val Pro Leu Pro Leu Leu Leu
  1              5              10              15

Leu Gly Gly Leu Ala Leu Leu Ala Ala Gly Val Asp Ala
      20              25

<210> 382
<211> 22
<212> PRT
<213> Homo sapiens

<400> 382
Met Met Lys Thr Leu Leu Leu Phe Val Gly Leu Leu Leu Thr Trp Glu
  1              5              10              15

Ser Gly Gln Val Leu Gly
      20

<210> 383
<211> 21
<212> PRT
<213> Homo sapiens

<400> 383
Met Leu Pro Leu Cys Leu Val Ala Ala Leu Leu Leu Ala Ala Gly Pro
  1              5              10              15

Gly Pro Ser Leu Gly
      20

<210> 384
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> MUTAGEN
<222> (14) to (18)
<223> Variant of HSA native leader

<400> 384
Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ala Gly Val
  1              5              10              15

Leu Gly

<210> 385
<211> 18
<212> PRT
<213> Artificial Sequence

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<220>
 <221> MUTAGEN
 <222> (14) to (18)
 <223> Variant of HSA native leader

 <400> 385
 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Gly Val
 1 5 10 15

Leu Gly

<210> 386
 <211> 18
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> MUTAGEN
 <222> (14) to (18)
 <223> Variant of HSA native leader

 <400> 386
 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Gly Gly Val
 1 5 10 15

Leu Gly

<210> 387
 <211> 18
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> MUTAGEN
 <222> (14) to (18)
 <223> Variant of HSA native leader

 <400> 387
 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ala Gly Val
 1 5 10 15

Ser Gly

<210> 388
 <211> 18
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> MUTAGEN
 <222> (14) to (18)
 <223> Variant of HSA native leader

<400> 388

Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Gly Val
1 5 10 15

Ser Gly

<210> 389
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> MUTAGEN
<222> (14) to (18)
<223> Variant of HSA native leader

<400> 389
Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Gly Gly Val
1 5 10 15

Ser Gly

<210> 390
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<221> MUTAGEN
<222> (14) to (23)
<223> Variant of HSA native leader

<400> 390
Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Gly Gly Val
1 5 10 15

Leu Gly Asp Leu His Lys Ser
20

<210> 391
<211> 9
<212> PRT
<213> Homo sapiens

<400> 391
Asp Ala His Lys Ser Glu Val Ala His
1 5

<210> 392
<211> 11
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1) to (11)

<223> Kozak sequence

<400> 392

ccgccacccat g

11

<210> 393

<211> 19

<212> PRT

<213> Homo sapiens

<400> 393

Met Leu Leu Gln Ala Phe Leu Phe Leu Leu Ala Gly Phe Ala Ala Lys
1 5 10 15

Ile Ser Ala

<210> 394

<211> 86

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (84)

<223> Xaa equals any one of Glu or Asp

<400> 394

Met Arg Phe Pro Ser Ile Phe Thr Ala Val Leu Ala Phe Ala Ala Ser
1 5 10 15

Ser Ala Leu Ala Ala Pro Val Asn Thr Thr Thr Glu Asp Glu Thr Ala
20 25 30

Gln Ile Pro Ala Glu Ala Val Ile Gly Tyr Ser Asp Leu Glu Gly Asp
35 40 45

Phe Asp Val Ala Val Leu Pro Phe Ser Asn Ser Thr Asn Asn Gly Leu
50 55 60

Leu Phe Ile Asn Thr Thr Ile Ala Ser Ile Ala Ala Lys Glu Glu Gly
65 70 75 80

Val Ser Leu Xaa Lys Arg
85

<210> 395

<211> 24

<212> PRT

<213> Homo sapiens

<400> 395

Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15

Tyr Ser Arg Ser Leu Glu Lys Arg
20

<210> 396
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 396
 Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15

Tyr Ser Arg Ser Leu Asp Lys Arg
 20

<210> 397
 <211> 733
 <212> DNA
 <213> Homo sapiens

<400> 397
 gggatccgga gcccaaattct tctgacaaaa ctcacacatg cccaccgtgc ccagcacctg 60
 aattcgaggg tgcaccgtca gtcttcctct tccccccaaa acccaaggac accctcatga 120
 tctcccgga tcctgaggtc acatgcgtgg tggaggacgt aagccacgaa gaccctgagg 180
 tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg 240
 aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact 300
 ggctgaatgg caaggagtag aagtgcgaagg tctccaacaa agccctccca acccccatcg 360
 agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acagggtgtac accctgcccc 420
 catcccggga tgagctgacc aagaaccagg tcagcctgac ctgcctgggtc aaaggcttct 480
 atccaagcga catcgccgtg gagtggggaga gcaatgggca gccggagAAC aactacaaga 540
 ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg 600
 acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc 660
 acaaccacta cagcagaag agcctctccc tgtctccggg taaatgagtg cgacggccgc 720
 gactctagag gat 733

<210> 398
 <211> 5
 <212> PRT
 <213> Homo sapiens

<220>
 <221> Site
 <222> (3)
 <223> Xaa equals any of the twenty naturally occurring L-amino acids

<400> 398
 Trp Ser Xaa Trp Ser
 1 5

<210> 399
 <211> 86
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> Primer_Bind
 <223> Synthetic sequence with 4 tandem copies of the GAS binding site
 found in the IRF1 promoter (Rothman et al., Immunity 1:457-468
 (1994)), 18 nucleotides complementary to the SV40 early promoter,

and a Xho I restriction site.

```
<400> 399
gcgccctcgag atttccccga aatctagatt tccccgaaat gatttccccg aaatgatttc 60
cccgaaatat ctgccatctc aattag 86
```

```
<210> 400
<211> 27
<212> DNA
<213> Artificial Sequence
```

```
<220>
<221> Primer_Bind
<223> Synthetic sequence complementary to the SV40 promoter; includes a
Hind III restriction site.
```

```
<400> 400
gcggcaagct ttttgcaaag cctaggc 27
```

```
<210> 401
<211> 271
<212> DNA
<213> Artificial Sequence
```

```
<220>
<221> Protein_Bind
<223> Synthetic promoter for use in biological assays; includes GAS
binding sites found in the IRF1 promoter (Rothman et al., Immunity
1:457-468 (1994)).
```

```
<400> 401
ctcgagattt ccccgaaatc tagatttccc cgaaatgatt tccccgaaat gatttccccg 60
aaatatctgc catctcaatt agtcagcaac catagtccccg cccctaactc cgcccatccc 120
gccctaact ccgcccagtt ccgcccattc tccgccccat ggctgactaa ttttttttat 180
ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt 240
ttttggaggc ctaggctttt gcaaaaagct t 271
```

```
<210> 402
<211> 32
<212> DNA
<213> Artificial Sequence
```

```
<220>
<221> Primer_Bind
<223> Synthetic primer complementary to human genomic EGR-1 promoter
sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a
Xho I restriction site.
```

```
<400> 402
gcgctcgagg gatgacagcg atagaacccc gg 32
```

```
<210> 403
<211> 31
<212> DNA
<213> Artificial Sequence
```

```
<220>
```

<221> Primer_Bind
 <223> Synthetic primer complementary to human genomic EGR-1 promoter sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a Hind III restriction site.

<400> 403
 gcgaagcttc gcgactcccc ggatccgcct c 31

<210> 404
 <211> 12
 <212> DNA
 <213> Homo sapiens

<400> 404
 ggggactttc cc 12

<210> 405
 <211> 73
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> Primer_Bind
 <223> Synthetic primer with 4 tandem copies of the NF-KB binding site (GGGGACTTCCCC), 18 nucleotides complementary to the 5' end of the SV40 early promoter sequence, and a XhoI restriction site.

<400> 405
 gcggcctcga ggggactttc ccgggggactt tccgggggact ttccggggact ttccatcctg 60
 ccatctcaat tag 73

<210> 406
 <211> 256
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> Protein_Bind
 <223> Synthetic promoter for use in biological assays; includes NF-KB binding sites.

<400> 406
 ctcgagggga ctttcccggg gactttccgg ggactttccg ggactttcca tctgccatct 60
 caattagtca gcaaccatag tcccggccct aactccgccc atcccggccc taactccgcc 120
 cagttccgcc cattctccgc cccatggctg actaattttt tttatttatg cagaggccga 180
 ggccgcctcg gcctctgagc tattccagaa gtagtgagga ggcttttttg gaggcctagg 240
 cttttgcaaa aagctt 256

<210> 407
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 407
 Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15

Tyr Ser Arg Gly Val Phe Arg Arg
20

<210> 408
<211> 18
<212> PRT
<213> Homo sapiens

<400> 408
Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15

Tyr Ser

<210> 409
<211> 21
<212> PRT
<213> Homo sapiens

<400> 409
Met Asn Ile Phe Tyr Ile Phe Leu Phe Leu Leu Ser Phe Val Gln Gly
1 5 10 15

Ser Leu Asp Lys Arg
20

<210> 410
<211> 24
<212> PRT
<213> Homo sapiens

<400> 410
Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15

Tyr Ser Arg Gly Val Phe Arg Arg
20

<210> 411
<211> 18
<212> PRT
<213> Homo sapiens

<400> 411
Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15

Tyr Ser

<210> 412
 <211> 543
 <212> DNA
 <213> Homo sapiens

<400> 412
 atgaaaagca tttactttgt ggctgggtta tttgtaatgc tgggtacaagg cagctggcaa 60
 cgttcccttc aagacacaga ggagaaatcc agatcattct cagcttccca ggcagaccca 120
 ctcatgtatc ctgatcagat gaacgaggac aagcgccatt cacagggcac attcaccagt 180
 gactacagca agtatctgga ctccaggcgt gccaagatt ttgtgcagtg gttgatgaat 240
 accaagagga acaggaataa cattgccaaa cgtcacgatg aatttgagag acatgctgaa 300
 gggaccttta ccagtgatgt aagttcttat ttggaaggcc aagctgcca ggaattcatt 360
 gcttggctgg tgaaaggccg aggaaggcga gatttcccag aagaggtcgc cattgttgaa 420
 gaacttggcc gcagacatgc tgatggttct ttctctgatg agatgaacac cattcttgat 480
 aatcttgccg ccagggactt tataaactgg ttgattcaga ccaaaatcac tgacaggaaa 540
 taa 543

<210> 413
 <211> 543
 <212> DNA
 <213> Homo sapiens

<400> 413
 atgaaaagca tttactttgt ggctgggtta tttgtaatgc tgggtacaagg cagctggcaa 60
 cgttcccttc aagacacaga ggagaaatcc agatcattct cagcttccca ggcagaccca 120
 ctcatgtatc ctgatcagat gaacgaggac aagcgccatt cacagggcac attcaccagt 180
 gactacagca agtatctgga ctccaggcgt gccaagatt ttgtgcagtg gttgatgaat 240
 accaagagga acaggaataa cattgccaaa cgtcacgatg aatttgagag acatgctgaa 300
 gggaccttta ccagtgatgt aagttcttat ttggaaggcc aagctgcca ggaattcatt 360
 gcttggctgg tgaaaggccg aggaaggcga gatttcccag aagaggtcgc cattgttgaa 420
 gaacttggcc gcagacatgc tgatggttct ttctctgatg agatgaacac cattcttgat 480
 aatcttgccg ccagggactt tataaactgg ttgattcaga ccaaaatcac tgacaggaaa 540
 taa 543

<210> 414
 <211> 543
 <212> DNA
 <213> Homo sapiens

<400> 414
 atgaaaagca tttactttgt ggctgggtta tttgtaatgc tgggtacaagg cagctggcaa 60
 cgttcccttc aagacacaga ggagaaatcc agatcattct cagcttccca ggcagaccca 120
 ctcatgtatc ctgatcagat gaacgaggac aagcgccatt cacagggcac attcaccagt 180
 gactacagca agtatctgga ctccaggcgt gccaagatt ttgtgcagtg gttgatgaat 240
 accaagagga acaggaataa cattgccaaa cgtcacgatg aatttgagag acatgctgaa 300
 gggaccttta ccagtgatgt aagttcttat ttggaaggcc aagctgcca ggaattcatt 360
 gcttggctgg tgaaaggccg aggaaggcga gatttcccag aagaggtcgc cattgttgaa 420
 gaacttggcc gcagacatgc tgatggttct ttctctgatg agatgaacac cattcttgat 480
 aatcttgccg ccagggactt tataaactgg ttgattcaga ccaaaatcac tgacaggaaa 540
 taa 543

<210> 415
 <211> 543
 <212> DNA
 <213> Homo sapiens

```

<400> 415
atgaaaagca tttactttgt ggctgggtta tttgtaatgc tgggtacaagg cagctggcaa      60
cgttcccttc aagacacaga ggagaaatcc agatcattct cagcttccca ggcagaccca      120
ctcagtgatc ctgatcagat gaacgaggac aagcgccatt cacagggcac attcaccagt      180
gactacagca agtatctgga ctccaggcgt gccaagatt ttgtgcagtg gttgatgaat      240
accaagagga acaggaataa cattgcaaaa cgtcacgatg aatttgagag acatgctgaa      300
gggaccttta ccagtgatgt aagttcttat ttggaaggcc aagctgcca ggaattcatt      360
gcttggctgg tgaaaggccg aggaaggcga gatttcccag aagaggtcgc cattgttgaa      420
gaacttggcc gcagacatgc tgatggttct ttctctgatg agatgaacac cattcttgat      480
aatcttgccg ccagggaactt tataaactgg ttgattcaga ccaaaatcac tgacaggaaa      540
taa

```

```

<210> 416
<211> 543
<212> DNA
<213> Homo sapiens

```

```

<400> 416
atgaaaagca tttactttgt ggctgggtta tttgtaatgc tgggtacaagg cagctggcaa      60
cgttcccttc aagacacaga ggagaaatcc agatcattct cagcttccca ggcagaccca      120
ctcagtgatc ctgatcagat gaacgaggac aagcgccatt cacagggcac attcaccagt      180
gactacagca agtatctgga ctccaggcgt gccaagatt ttgtgcagtg gttgatgaat      240
accaagagga acaggaataa cattgcaaaa cgtcacgatg aatttgagag acatgctgaa      300
gggaccttta ccagtgatgt aagttcttat ttggaaggcc aagctgcca ggaattcatt      360
gcttggctgg tgaaaggccg aggaaggcga gatttcccag aagaggtcgc cattgttgaa      420
gaacttggcc gcagacatgc tgatggttct ttctctgatg agatgaacac cattcttgat      480
aatcttgccg ccagggaactt tataaactgg ttgattcaga ccaaaatcac tgacaggaaa      540
taa

```

```

<210> 417
<211> 180
<212> DNA
<213> Homo sapiens

```

```

<400> 417
cacgtgaag gtactttcac ttctgatgtt tcttcttact tggaagggtca agctgctaag      60
gaattcattg cttggttggg taagggtaga catgcagagg gaacatttac atcagacgtc      120
tcatcatatt tagagggaca ggcagcaaaa gagtttatag catggttagt aaaaggaagg      180

```

```

<210> 418
<211> 180
<212> DNA
<213> Homo sapiens

```

```

<400> 418
cacggtgaag gtactttcac ttctgatgtt tcttcttact tggaagggtca agctgctaag      60
gaattcattg cttggttggg taagggtaga catgcagagg gaacatttac atcagacgtc      120
tcatcatatt tagagggaca ggcagcaaaa gagtttatag catggttagt aaaaggaagg      180

```

```

<210> 419
<211> 669
<212> PRT
<213> Homo sapiens

```

```

<400> 419

```

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala	1	5	10	15
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	20	25	30	
Asp	Val	Ser	Ser	Tyr	Leu	Glu	Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala	35	40	45	
Trp	Leu	Val	Lys	Gly	Arg	His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val	50	55	60	
Ser	Ser	Tyr	Leu	Glu	Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala	Trp	Leu	65	70	75	
Val	Lys	Gly	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	85	90	95	
Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	100	105	110	
Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	115	120	125	
Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	130	135	140	
Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	145	150	155	
Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	165	170	175	
Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	180	185	190	
Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	195	200	205	
Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	210	215	220	
Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	225	230	235	
Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	245	250	255	
Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	260	265	270	
Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	275	280	285	
Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	290	295	300	

Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr
 305 310 315 320
 Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu
 325 330 335
 Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln
 340 345 350
 Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu
 355 360 365
 Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala
 370 375 380
 Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys
 385 390 395 400
 Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr
 405 410 415
 Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg
 420 425 430
 Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala
 435 440 445
 Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu
 450 455 460
 Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu
 465 470 475 480
 Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr
 485 490 495
 Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg
 500 505 510
 Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys
 515 520 525
 Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu
 530 535 540
 Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys
 545 550 555 560
 Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu
 565 570 575
 Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr
 580 585 590
 Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys
 595 600 605

Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr
 610 615 620
 Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu
 625 630 635 640
 Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly
 645 650 655
 Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 660 665

<210> 420
 <211> 669
 <212> PRT
 <213> Homo sapiens

<400> 420
 Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Ser Leu Asp Lys Arg His Ala Glu Gly Thr Phe Thr Ser
 20 25 30
 Asp Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala
 35 40 45
 Trp Leu Val Lys Gly Arg His Ala Glu Gly Thr Phe Thr Ser Asp Val
 50 55 60
 Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu
 65 70 75 80
 Val Lys Gly Arg Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys
 85 90 95
 Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala
 100 105 110
 Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn
 115 120 125
 Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu
 130 135 140
 Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr
 145 150 155 160
 Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala
 165 170 175
 Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp
 180 185 190
 Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys

195					200					205					
Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr
	210					215					220				
Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe
225					230					235					240
Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala
				245					250					255	
Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu
			260					265					270		
Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln
	275						280					285			
Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser
	290					295					300				
Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr
305					310					315					320
Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu
				325					330					335	
Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln
			340					345					350		
Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu
	355						360					365			
Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala
	370					375					380				
Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys
385					390					395					400
Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr
				405					410					415	
Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg
			420					425					430		
Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala
	435						440					445			
Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu
	450					455					460				
Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu
465					470					475					480
Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr
				485					490					495	
Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg

500					505					510					
Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys
		515					520					525			
Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu
	530					535					540				
Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys
545					550					555					560
Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu
				565					570						575
Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr
			580					585					590		
Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys
		595					600					605			
Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr
	610					615					620				
Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu
625					630					635					640
Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly
				645				650						655	
Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	Leu			
			660					665							

<210> 421
 <211> 669
 <212> PRT
 <213> Homo sapiens

<400> 421															
Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	His	Ala	Glu	Gly	Thr	Phe	Thr	Ser
			20					25					30		
Asp	Val	Ser	Ser	Tyr	Leu	Glu	Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala
		35					40					45			
Trp	Leu	Val	Lys	Gly	Arg	His	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val
	50					55					60				
Ser	Ser	Tyr	Leu	Glu	Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala	Trp	Leu
65					70					75					80
Val	Lys	Gly	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys
				85					90					95	

Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala		
			100					105					110				
Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn		
		115					120					125					
Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu		
		130				135					140						
Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr		
145					150					155					160		
Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala		
				165					170					175			
Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp		
			180					185					190				
Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys		
		195					200					205					
Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr		
		210				215					220						
Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe		
225					230					235					240		
Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala		
				245					250					255			
Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu		
			260					265					270				
Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln		
		275					280					285					
Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser		
		290				295					300						
Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr		
305					310					315					320		
Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu		
				325					330					335			
Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln		
			340					345					350				
Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu		
		355					360					365					
Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala		
		370				375					380						
Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys		
385					390					395					400		

Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr
 405 410 415
 Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg
 420 425 430
 Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala
 435 440 445
 Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu
 450 455 460
 Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu
 465 470 475 480
 Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr
 485 490 495
 Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg
 500 505 510
 Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys
 515 520 525
 Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu
 530 535 540
 Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys
 545 550 555 560
 Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu
 565 570 575
 Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr
 580 585 590
 Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys
 595 600 605
 Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr
 610 615 620
 Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu
 625 630 635 640
 Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly
 645 650 655
 Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 660 665

<210> 422
 <211> 667
 <212> PRT

<213> Homo sapiens

<400> 422

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val
			20					25					30		
Ser	Ser	Tyr	Leu	Glu	Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala	Trp	Leu
		35					40					45			
Val	Lys	Gly	Arg	His	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val	Ser	Ser
	50					55					60				
Tyr	Leu	Glu	Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala	Trp	Leu	Val	Lys
65				70						75					80
Gly	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu
				85					90					95	
Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr
			100					105					110		
Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val
		115					120					125			
Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys
	130					135					140				
Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala
145					150					155					160
Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln
				165					170					175	
Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro
			180					185					190		
Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala
		195					200					205			
Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile
	210					215					220				
Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala
225					230					235					240
Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys
				245					250					255	
Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys
			260					265					270		
Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe
		275					280					285			

Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg		
290						295					300						
Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu		
305					310					315					320		
Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala		
				325					330					335			
Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser		
			340					345					350				
Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys		
		355					360					365					
Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu		
	370					375					380						
Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn		
385					390					395					400		
Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr		
				405					410					415			
Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala		
			420					425					430				
Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro		
		435					440					445					
His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu		
	450					455					460						
Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu		
465					470					475					480		
Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys		
				485					490					495			
Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu		
			500					505					510				
Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met		
		515					520					525					
Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val		
	530					535					540						
Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr		
545					550					555					560		
Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp		
				565					570					575			
Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His		
			580					585					590				

Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln
595 600 605

Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu
610 615 620

Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys
625 630 635 640

Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys
645 650 655

Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
660 665

<210> 423
<211> 669
<212> PRT
<213> Homo sapiens

<400> 423
Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15

Tyr Ser Arg Ser Leu Asp Lys Arg His Ser Glu Gly Thr Phe Thr Ser
20 25 30

Asp Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala
35 40 45

Trp Leu Val Lys Gly Arg His Ala Glu Gly Thr Phe Thr Ser Asp Val
50 55 60

Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu
65 70 75 80

Val Lys Gly Arg Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys
85 90 95

Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala
100 105 110

Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn
115 120 125

Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu
130 135 140

Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr
145 150 155 160

Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala
165 170 175

Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp

180						185						190					
Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys		
		195					200					205					
Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr		
	210					215					220						
Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe		
225					230					235					240		
Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala		
				245					250					255			
Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu		
			260					265					270				
Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln		
		275					280					285					
Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser		
	290					295					300						
Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr		
305					310					315					320		
Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu		
				325					330					335			
Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln		
			340					345					350				
Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu		
		355					360					365					
Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala		
	370					375					380						
Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys		
385					390					395					400		
Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr		
				405					410					415			
Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg		
			420					425					430				
Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala		
		435					440					445					
Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu		
	450					455					460						
Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu		
465					470					475					480		
Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr		

485								490				495			
Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg
			500					505					510		
Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys
		515					520					525			
Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu
	530					535					540				
Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys
545					550					555					560
Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu
				565					570					575	
Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr
			580					585					590		
Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys
		595					600					605			
Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr
	610					615					620				
Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu
625					630					635					640
Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly
				645					650					655	
Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	Leu			
			660					665							

<210> 424

<211> 669

<212> PRT

<213> Homo sapiens

<400> 424

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	His	Ala	Glu	Gly	Thr	Phe	Thr	Ser
			20					25					30		
Asp	Val	Ser	Ser	Tyr	Leu	Glu	Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala
		35					40					45			
Trp	Leu	Val	Lys	Gly	Arg	His	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val
	50					55					60				
Ser	Ser	Tyr	Leu	Glu	Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala	Trp	Leu
65					70					75					80

Val	Lys	Gly	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	85	90	95
Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	100	105	110
Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	115	120	125
Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	130	135	140
Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	145	150	155
Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	165	170	175
Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	180	185	190
Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	195	200	205
Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	210	215	220
Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	225	230	235
Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	245	250	255
Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	260	265	270
Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	275	280	285
Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	290	295	300
Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	305	310	315
Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	325	330	335
Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	340	345	350
Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	355	360	365
Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	370	375	380

Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	385	390	395	400
Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	405	410	415	
Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	420	425	430	
Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	435	440	445	
Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	450	455	460	
Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	465	470	475	480
Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	485	490	495	
Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	500	505	510	
Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	515	520	525	
Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	530	535	540	
Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	545	550	555	560
Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	565	570	575	
Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	580	585	590	
Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	595	600	605	
Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr	610	615	620	
Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	625	630	635	640
Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	645	650	655	
Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	Leu				660	665		

<210> 425
 <211> 669
 <212> PRT
 <213> Homo sapiens

<400> 425

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	His	Gly	Glu	Gly	Thr	Phe	Thr	Ser
			20					25					30		
Asp	Val	Ser	Ser	Tyr	Leu	Glu	Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala
		35					40					45			
Trp	Leu	Val	Lys	Gly	Arg	His	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val
	50					55					60				
Ser	Ser	Tyr	Leu	Glu	Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala	Trp	Leu
65					70					75					80
Val	Lys	Gly	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys
				85					90					95	
Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala
			100					105					110		
Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn
		115						120				125			
Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu
	130					135					140				
Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr
145					150					155					160
Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala
				165					170					175	
Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp
			180					185					190		
Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys
		195					200					205			
Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr
	210					215					220				
Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe
225					230					235					240
Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala
				245					250					255	
Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu
			260					265					270		

Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	275	280	285
Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	290	295	300
Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	305	310	315
Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	325	330	335
Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	340	345	350
Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	355	360	365
Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	370	375	380
Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	385	390	395
Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	405	410	415
Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	420	425	430
Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	435	440	445
Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	450	455	460
Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	465	470	475
Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	485	490	495
Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	500	505	510
Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	515	520	525
Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	530	535	540
Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	545	550	555
Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	565	570	575

Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr
 580 585 590
 Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys
 595 600 605
 Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr
 610 615 620
 Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu
 625 630 635 640
 Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly
 645 650 655
 Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 660 665

<210> 426
 <211> 180
 <212> PRT
 <213> Homo sapiens

<400> 426

Met Lys Ser Ile Tyr Phe Val Ala Gly Leu Phe Val Met Leu Val Gln
 1 5 10 15
 Gly Ser Trp Gln Arg Ser Leu Gln Asp Thr Glu Glu Lys Ser Arg Ser
 20 25 30
 Phe Ser Ala Ser Gln Ala Asp Pro Leu Ser Asp Pro Asp Gln Met Asn
 35 40 45
 Glu Asp Lys Arg His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys
 50 55 60
 Tyr Leu Asp Ser Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn
 65 70 75 80
 Thr Lys Arg Asn Arg Asn Asn Ile Ala Lys Arg His Asp Glu Phe Glu
 85 90 95
 Arg His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu
 100 105 110
 Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
 115 120 125
 Arg Arg Asp Phe Pro Glu Glu Val Ala Ile Val Glu Glu Leu Gly Arg
 130 135 140
 Arg His Ala Asp Gly Ser Phe Ser Asp Glu Met Asn Thr Ile Leu Asp
 145 150 155 160
 Asn Leu Ala Ala Arg Asp Phe Ile Asn Trp Leu Ile Gln Thr Lys Ile

165 170 175
 Thr Asp Arg Lys
 180

 <210> 427
 <211> 180
 <212> PRT
 <213> Homo sapiens

 <400> 427
 Met Lys Ser Ile Tyr Phe Val Ala Gly Leu Phe Val Met Leu Val Gln
 1 5 10 15
 Gly Ser Trp Gln Arg Ser Leu Gln Asp Thr Glu Glu Lys Ser Arg Ser
 20 25 30
 Phe Ser Ala Ser Gln Ala Asp Pro Leu Ser Asp Pro Asp Gln Met Asn
 35 40 45
 Glu Asp Lys Arg His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys
 50 55 60
 Tyr Leu Asp Ser Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn
 65 70 75 80
 Thr Lys Arg Asn Arg Asn Asn Ile Ala Lys Arg His Asp Glu Phe Glu
 85 90 95
 Arg His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu
 100 105 110
 Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
 115 120 125
 Arg Arg Asp Phe Pro Glu Glu Val Ala Ile Val Glu Glu Leu Gly Arg
 130 135 140
 Arg His Ala Asp Gly Ser Phe Ser Asp Glu Met Asn Thr Ile Leu Asp
 145 150 155 160
 Asn Leu Ala Ala Arg Asp Phe Ile Asn Trp Leu Ile Gln Thr Lys Ile
 165 170 175
 Thr Asp Arg Lys
 180

<210> 428
 <211> 180
 <212> PRT
 <213> Homo sapiens

<400> 428

Met	Lys	Ser	Ile	Tyr	Phe	Val	Ala	Gly	Leu	Phe	Val	Met	Leu	Val	Gln	
1				5					10					15		
Gly	Ser	Trp	Gln	Arg	Ser	Leu	Gln	Asp	Thr	Glu	Glu	Lys	Ser	Arg	Ser	
			20					25					30			
Phe	Ser	Ala	Ser	Gln	Ala	Asp	Pro	Leu	Ser	Asp	Pro	Asp	Gln	Met	Asn	
		35					40					45				
Glu	Asp	Lys	Arg	His	Ser	Gln	Gly	Thr	Phe	Thr	Ser	Asp	Tyr	Ser	Lys	
	50					55					60					
Tyr	Leu	Asp	Ser	Arg	Arg	Ala	Gln	Asp	Phe	Val	Gln	Trp	Leu	Met	Asn	
65					70					75					80	
Thr	Lys	Arg	Asn	Arg	Asn	Asn	Ile	Ala	Lys	Arg	His	Asp	Glu	Phe	Glu	
			85						90					95		
Arg	His	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val	Ser	Ser	Tyr	Leu	Glu	
			100					105					110			
Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala	Trp	Leu	Val	Lys	Gly	Arg	Gly	
		115					120					125				
Arg	Arg	Asp	Phe	Pro	Glu	Glu	Val	Ala	Ile	Val	Glu	Glu	Leu	Gly	Arg	
		130				135					140					
Arg	His	Ala	Asp	Gly	Ser	Phe	Ser	Asp	Glu	Met	Asn	Thr	Ile	Leu	Asp	
145					150					155					160	
Asn	Leu	Ala	Ala	Arg	Asp	Phe	Ile	Asn	Trp	Leu	Ile	Gln	Thr	Lys	Ile	
				165					170					175		
Thr	Asp	Arg	Lys													
			180													

<210> 429

<211> 180

<212> PRT

<213> Homo sapiens

<400> 429

Met	Lys	Ser	Ile	Tyr	Phe	Val	Ala	Gly	Leu	Phe	Val	Met	Leu	Val	Gln	
1				5					10					15		
Gly	Ser	Trp	Gln	Arg	Ser	Leu	Gln	Asp	Thr	Glu	Glu	Lys	Ser	Arg	Ser	
			20					25					30			
Phe	Ser	Ala	Ser	Gln	Ala	Asp	Pro	Leu	Ser	Asp	Pro	Asp	Gln	Met	Asn	
		35					40					45				
Glu	Asp	Lys	Arg	His	Ser	Gln	Gly	Thr	Phe	Thr	Ser	Asp	Tyr	Ser	Lys	

50		55		60											
Tyr	Leu	Asp	Ser	Arg	Arg	Ala	Gln	Asp	Phe	Val	Gln	Trp	Leu	Met	Asn
65					70					75					80
Thr	Lys	Arg	Asn	Arg	Asn	Asn	Ile	Ala	Lys	Arg	His	Asp	Glu	Phe	Glu
			85						90					95	
Arg	His	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val	Ser	Ser	Tyr	Leu	Glu
			100					105					110		
Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala	Trp	Leu	Val	Lys	Gly	Arg	Gly
			115				120					125			
Arg	Arg	Asp	Phe	Pro	Glu	Glu	Val	Ala	Ile	Val	Glu	Glu	Leu	Gly	Arg
			130			135					140				
Arg	His	Ala	Asp	Gly	Ser	Phe	Ser	Asp	Glu	Met	Asn	Thr	Ile	Leu	Asp
145					150					155					160
Asn	Leu	Ala	Ala	Arg	Asp	Phe	Ile	Asn	Trp	Leu	Ile	Gln	Thr	Lys	Ile
				165					170					175	
Thr	Asp	Arg	Lys												
			180												

<210> 430
 <211> 180
 <212> PRT
 <213> Homo sapiens

<400> 430															
Met	Lys	Ser	Ile	Tyr	Phe	Val	Ala	Gly	Leu	Phe	Val	Met	Leu	Val	Gln
1				5					10					15	
Gly	Ser	Trp	Gln	Arg	Ser	Leu	Gln	Asp	Thr	Glu	Glu	Lys	Ser	Arg	Ser
			20					25					30		
Phe	Ser	Ala	Ser	Gln	Ala	Asp	Pro	Leu	Ser	Asp	Pro	Asp	Gln	Met	Asn
		35					40					45			
Glu	Asp	Lys	Arg	His	Ser	Gln	Gly	Thr	Phe	Thr	Ser	Asp	Tyr	Ser	Lys
	50					55					60				
Tyr	Leu	Asp	Ser	Arg	Arg	Ala	Gln	Asp	Phe	Val	Gln	Trp	Leu	Met	Asn
65					70					75					80
Thr	Lys	Arg	Asn	Arg	Asn	Asn	Ile	Ala	Lys	Arg	His	Asp	Glu	Phe	Glu
			85						90					95	
Arg	His	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val	Ser	Ser	Tyr	Leu	Glu
			100					105					110		
Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala	Trp	Leu	Val	Lys	Gly	Arg	Gly

115	120	125
Arg Arg Asp Phe Pro Glu Glu Val Ala Ile Val Glu Glu Leu Gly Arg		
130	135	140
Arg His Ala Asp Gly Ser Phe Ser Asp Glu Met Asn Thr Ile Leu Asp		
145	150	155
Asn Leu Ala Ala Arg Asp Phe Ile Asn Trp Leu Ile Gln Thr Lys Ile		
165	170	175
Thr Asp Arg Lys		
180		

<210> 431
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 431
His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg His Ala
20 25 30
Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly Gln Ala
35 40 45
Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg
50 55 60

<210> 432
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 432
His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg His Ala
20 25 30
Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly Gln Ala
35 40 45
Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg
50 55 60

<210> 433
 <211> 22
 <212> DNA
 <213> Homo sapiens

<400> 433	
aggagcgtcg acaaaagaca cg	22
<210> 434	
<211> 26	
<212> DNA	
<213> Homo sapiens	
<400> 434	
ctttaaatcg atgagcaacc tcactc	26
<210> 435	
<211> 22	
<212> DNA	
<213> Homo sapiens	
<400> 435	
aggagcgtcg acaaaagaca cg	22
<210> 436	
<211> 26	
<212> DNA	
<213> Homo sapiens	
<400> 436	
ctttaaatcg atgagcaacc tcactc	26
<210> 437	
<211> 22	
<212> DNA	
<213> Homo sapiens	
<400> 437	
aggagcgtcg acaaaagaca cg	22
<210> 438	
<211> 26	
<212> DNA	
<213> Homo sapiens	
<400> 438	
ctttaaatcg atgagcaacc tcactc	26
<210> 439	
<211> 22	
<212> DNA	
<213> Homo sapiens	
<400> 439	
aggagcgtcg acaaaagaga ag	22
<210> 440	
<211> 26	
<212> DNA	
<213> Homo sapiens	

<400> 440 ctttaaatcg atgagcaacc tcactc	26
<210> 441 <211> 22 <212> DNA <213> Homo sapiens	
<400> 441 aggagcgtcg acaaaagaca ca	22
<210> 442 <211> 26 <212> DNA <213> Homo sapiens	
<400> 442 ctttaaatcg atgagcaacc tcactc	26
<210> 443 <211> 29 <212> DNA <213> Homo sapiens	
<400> 443 agcgtcgaca aaagacacgc tgaaggtac	29
<210> 444 <211> 21 <212> DNA <213> Homo sapiens	
<400> 444 catgatcttc aaatggacac t	21
<210> 445 <211> 22 <212> DNA <213> Homo sapiens	
<400> 445 aggagcgtcg acaaaagaca cg	22
<210> 446 <211> 21 <212> DNA <213> Homo sapiens	
<400> 446 catgatcttc aaatggacac t	21
<210> 447 <211> 674 <212> PRT <213> Homo sapiens	

<400> 447

Met Asn Ile Phe Tyr Ile Phe Leu Phe Leu Leu Ser Phe Val Gln Gly
1 5 10 15
Leu Glu His Thr His Arg Arg Gly Ser Leu Asp Lys Arg His Gly Glu
20 25 30
Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala
35 40 45
Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg His Gly Glu Gly Thr
50 55 60
Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu
65 70 75 80
Phe Ile Ala Trp Leu Val Lys Gly Arg Asp Ala His Lys Ser Glu Val
85 90 95
Ala His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val
100 105 110
Leu Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His
115 120 125
Val Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala
130 135 140
Asp Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly
145 150 155 160
Asp Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met
165 170 175
Ala Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu
180 185 190
Gln His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu
195 200 205
Val Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu
210 215 220
Lys Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala
225 230 235 240
Pro Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu
245 250 255
Cys Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp
260 265 270
Glu Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys
275 280 285
Cys Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala
290 295 300

Val Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val
305 310 315 320
Ser Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His
325 330 335
Gly Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr
340 345 350
Ile Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys
355 360 365
Glu Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn
370 375 380
Asp Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu
385 390 395 400
Ser Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu
405 410 415
Gly Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val
420 425 430
Val Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys
435 440 445
Cys Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp
450 455 460
Glu Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn
465 470 475 480
Cys Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu
485 490 495
Leu Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu
500 505 510
Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys
515 520 525
His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val
530 535 540
Val Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp
545 550 555 560
Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys
565 570 575
Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn
580 585 590
Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys
595 600 605

Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His
610 615 620

Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe
625 630 635 640

Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys
645 650 655

Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu
660 665 670

Gly Leu

<210> 448
<211> 267
<212> DNA
<213> Homo sapiens

<400> 448
atgaacattt tctacatttt cttgttcttg ttgtctttcg ttcaagggtt ggaacacact 60
cacagaagag gttctttgga taagagacac ggtgaaggta ctttcacttc tgatgtttct 120
tcttacttgg aaggtcaagc tgctaaggaa ttcattgctt gggttggttaa gggtagacat 180
ggagagggaa catttacatc agacgtctca tcatatttag agggacaggc agcaaaagag 240
tttatagcat ggtagtaaa aggaagg 267

<210> 449
<211> 89
<212> PRT
<213> Homo sapiens

<400> 449
Met Asn Ile Phe Tyr Ile Phe Leu Phe Leu Leu Ser Phe Val Gln Gly
1 5 10 15
Leu Glu His Thr His Arg Arg Gly Ser Leu Asp Lys Arg His Gly Glu
20 25 30
Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala
35 40 45
Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg His Gly Glu Gly Thr
50 55 60
Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu
65 70 75 80
Phe Ile Ala Trp Leu Val Lys Gly Arg
85

<210> 450
<211> 20
<212> DNA

<213> Homo sapiens

<400> 450

gtcaataacct tcttgaacca

20

<210> 451

<211> 27

<212> DNA

<213> Homo sapiens

<400> 451

ctcccaaatac tttaaatacga tgagcaa

27

<210> 452

<211> 774

<212> PRT

<213> Homo sapiens

<400> 452

Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15

Tyr Ser Arg Ser Leu Asp Lys Arg Asp Ala His Lys Ser Glu Val Ala
20 25 30

His Arg Phe Lys Asp Leu Gly Glu Asn Phe Lys Ala Leu Val Leu
35 40 45

Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
50 55 60

Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
65 70 75 80

Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
85 90 95

Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
100 105 110

Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
115 120 125

His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
130 135 140

Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
145 150 155 160

Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
165 170 175

Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
180 185 190

Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	195	200	205	
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	210	215	220	
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	225	230	235	240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	245	250	255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	260	265	270	
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	275	280	285	
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	290	295	300	
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	305	310	315	320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	325	330	335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	340	345	350	
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	355	360	365	
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	370	375	380	
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	385	390	395	400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	405	410	415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	420	425	430	
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	435	440	445	
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	450	455	460	
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	465	470	475	480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	485	490	495	

Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe		
			500					505					510				
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala		
		515					520					525					
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu		
	530					535					540						
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys		
545					550					555					560		
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala		
				565					570					575			
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe		
			580					585					590				
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly		
		595					600					605					
Leu	Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu		
	610					615					620						
Met	Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys		
625				630						635					640		
Asp	Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe		
				645					650					655			
Gln	Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile		
			660					665					670				
Phe	Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr		
		675					680					685					
Leu	Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu		
	690					695					700						
Glu	Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met		
705					710					715					720		
Lys	Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr		
				725					730					735			
Leu	Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val		
			740					745					750				
Arg	Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu		
		755					760						765				
Ser	Leu	Arg	Ser	Lys	Glu												
			770														
<210> 453																	
<211> 495																	

<212> DNA

<213> Homo sapiens

<400> 453

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gaggagtgtg gcaaccagtt ccaaaaggct gaaaccatcc ctgtcctcca tgagatgatc 180
cagcagatct tcaatctctt cagcacaaag gactcatctg ctgcttgga tgagaccctc 240
ctagacaaat tctacactga actctaccag cagctgaatg acctggaagc ctgtgtgata 300
caggggggtgg ggggtgacaga gactcccctg atgaaggagg actccattct ggctgtgagg 360
aaatacttcc aaagaatcac tctctatctg aaagagaaga aatacagccc ttgtgcctgg 420
gaggttgtca gagcagaaat catgagatct ttttctttgt caacaaactt gcaagaaagt 480
ttaagaagta aggaa                                     495
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<210> 454

<211> 165

<212> PRT

<213> Homo sapiens

<400> 454

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Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
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Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
          20              25              30

Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
      35              40              45

Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
      50              55              60

Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
      65              70              75              80

Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
          85              90              95

Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
      100              105              110

Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
      115              120              125

Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
      130              135              140

Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
      145              150              155              160

Leu Arg Ser Lys Glu
          165
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<210> 455

<211> 774

<212> PRT

<213> Homo sapiens

<400> 455

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
65					70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
145					150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
225					230					235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245					250					255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly
			260					265					270		
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile
		275					280					285			

Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu		
290						295					300						
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp		
305					310					315					320		
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser		
				325					330					335			
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly		
			340					345					350				
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val		
		355					360					365					
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys		
		370				375						380					
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu		
385					390					395					400		
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys		
				405					410					415			
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu		
			420					425					430				
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val		
		435					440					445					
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His		
		450				455					460						
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val		
465					470					475					480		
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg		
				485					490					495			
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe		
			500					505					510				
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala		
		515					520					525					
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu		
		530				535					540						
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys		
545					550					555					560		
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala		
				565					570					575			
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe		
			580					585					590				

Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu
 610 615 620
 Met Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys
 625 630 635 640
 Asp Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe
 645 650 655
 Gln Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile
 660 665 670
 Phe Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr
 675 680 685
 Leu Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu
 690 695 700
 Glu Ala Cys Val Met Gln Glu Glu Arg Val Gly Glu Thr Pro Leu Met
 705 710 715 720
 Asn Ala Asp Ser Ile Leu Ala Val Lys Lys Tyr Phe Arg Arg Ile Thr
 725 730 735
 Leu Tyr Leu Thr Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val
 740 745 750
 Arg Ala Glu Ile Met Arg Ser Leu Ser Leu Ser Thr Asn Leu Gln Glu
 755 760 765
 Arg Leu Arg Arg Lys Glu
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<210> 456

<211> 495

<212> DNA

<213> Homo sapiens

<400> 456

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 gaggagttag gcaaccagtt ccaaaaggct gaaaccatcc ctgtcctcca tgagatgatc 180
 cagcagatct tcaatctctt cagcacaaag gactcatctg ctgcttggga tgagaccctc 240
 ctagacaaat tctacactga actctaccag cagctgaatg acttggaagc ctgtgtgatg 300
 caggaggaga ggggtgggaga aactcccctg atgaatgcgg actccatctt ggctgtgaag 360
 aaatacttcc gaagaatcac tctctatctg acagagaaga aatacagccc ttgtgcctgg 420
 gaggttgatc gagcagaaat catgagatcc ctctctttat caacaaactt gcaagaaaga 480
 ttaaggagga aggaa 495

<210> 457

<211> 165

<212> PRT

<213> Homo sapiens

<400> 457

Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
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Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
20 25 30
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
35 40 45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
50 55 60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
65 70 75 80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
85 90 95
Ala Cys Val Met Gln Glu Glu Arg Val Gly Glu Thr Pro Leu Met Asn
100 105 110
Ala Asp Ser Ile Leu Ala Val Lys Lys Tyr Phe Arg Arg Ile Thr Leu
115 120 125
Tyr Leu Thr Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
130 135 140
Ala Glu Ile Met Arg Ser Leu Ser Leu Ser Thr Asn Leu Gln Glu Arg
145 150 155 160
Leu Arg Arg Lys Glu
165

<210> 458

<211> 38

<212> DNA

<213> Homo sapiens

<400> 458

caagctgcct taggcttatg tgatctgcct caaaccca

38

<210> 459

<211> 39

<212> DNA

<213> Homo sapiens

<400> 459

gcgcatggcg cgccttattc cttcctcctt aatctttct

39

<210> 460

<211> 774

<212> PRT

<213> Homo sapiens

<400> 460

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
	65				70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
	145				150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
	225				230					235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245					250					255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly
			260					265					270		
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile
		275					280					285			

Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	290	295	300	
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	305	310	315	320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	325	330	335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	340	345	350	
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	355	360	365	
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	370	375	380	
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	385	390	395	400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	405	410	415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	420	425	430	
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	435	440	445	
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	450	455	460	
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	465	470	475	480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	485	490	495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	500	505	510	
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	515	520	525	
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	530	535	540	
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	545	550	555	560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	565	570	575	
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	580	585	590	

Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu
 610 615 620
 Met Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys
 625 630 635 640
 Asp Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe
 645 650 655
 Gln Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile
 660 665 670
 Phe Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr
 675 680 685
 Leu Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu
 690 695 700
 Glu Ser Cys Val Met Gln Glu Val Gly Val Ile Glu Ser Pro Leu Met
 705 710 715 720
 Tyr Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr
 725 730 735
 Leu Tyr Leu Thr Glu Lys Lys Tyr Ser Ser Cys Ala Trp Glu Val Val
 740 745 750
 Arg Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Ile Asn Leu Gln Lys
 755 760 765
 Arg Leu Lys Ser Lys Glu
 770

<210> 461
 <211> 495
 <212> DNA
 <213> Homo sapiens

<400> 461
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 gaggagttag gcaaccagtt ccaaaaggct gaaaccatcc ctgtcctcca tgagatgac 180
 cagcagatct tcaatctctt cagcacaag gactcatctg ctgcttgga tgagaccctc 240
 ctagacaaat tctacactga actctaccag cagctgaatg acctggagtc ctgtgtgatg 300
 caggaagtgg gggatgata gtctccctg atgtacgagg actccatcct ggctgtgagg 360
 aaatacttcc aaagaatcac tctatatctg acagagaaga aatacagctc ttgtgcctgg 420
 gaggtgtca gagcagaaat catgagatcc ttctctttat caatcaactt gcaaaaaaga 480
 ttgaagagta aggaa 495

<210> 462

<211> 165
 <212> PRT
 <213> Homo sapiens

<400> 462
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
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 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
 20 25 30
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
 35 40 45
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
 50 55 60
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
 65 70 75 80
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
 85 90 95
 Ser Cys Val Met Gln Glu Val Gly Val Ile Glu Ser Pro Leu Met Tyr
 100 105 110
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
 115 120 125
 Tyr Leu Thr Glu Lys Lys Tyr Ser Ser Cys Ala Trp Glu Val Val Arg
 130 135 140
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Ile Asn Leu Gln Lys Arg
 145 150 155 160
 Leu Lys Ser Lys Glu
 165

<210> 463
 <211> 38
 <212> DNA
 <213> Homo sapiens

<400> 463
 caagctgcct taggcttatg tgatctgcct caaaccca 38

<210> 464
 <211> 38
 <212> DNA
 <213> Homo sapiens

<400> 464
 gcgcacggcg cgcctcattc cttactcttc aatctttt 38

<210> 465

<211> 774
 <212> PRT
 <213> Homo sapiens

<400> 465

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
	65				70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
145					150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
			165						170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
225					230					235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245					250					255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly
			260					265					270		
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile

275					280					285					
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu
290						295					300				
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp
305					310					315					320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser
				325					330					335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly
			340					345					350		
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val
		355					360					365			
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys
		370				375					380				
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu
385					390					395					400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys
				405					410					415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu
			420					425					430		
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val
		435					440					445			
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His
		450				455					460				
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val
465					470					475					480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg
				485					490					495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe
			500					505					510		
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala
			515				520					525			
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu
						535					540				
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys
545					550					555					560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala
				565					570					575	
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe

580					585					590						
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	
595					600					605						
Leu	Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	
610					615					620						
Met	Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	
625					630					635					640	
Asp	Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	
645					650					655						
Gln	Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	
660					665					670						
Phe	Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	
675					680					685						
Leu	Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Met	
690					695					700						
Glu	Ala	Cys	Val	Ile	Gln	Glu	Val	Gly	Val	Glu	Glu	Thr	Pro	Leu	Met	
705					710					715					720	
Asn	Val	Asp	Ser	Ile	Leu	Ala	Val	Lys	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	
725					730					735						
Leu	Tyr	Leu	Thr	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	
740					745					750						
Arg	Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Lys	Ile	Phe	Gln	Glu	
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Arg	Leu	Arg	Arg	Lys	Glu											
770																

<210> 466

<211> 495

<212> DNA

<213> Homo sapiens

<400> 466

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cagcagatct tcaatctctt cagcacaag gactcatctg ctgcttgagg tgagaccctc 240
ctagacaaat tctacactga actctaccag cagctgaatg acatggaagc ctgcgtgata 300
caggagggtg ggggtggaaga gactcccctg atgaatgtgg actccatctt ggctgtgaag 360
aaatacttcc aaagaatcac tctttatctg acagagaaga aatacagccc ttgtgcttgg 420
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<210> 467

<211> 165

<212> PRT

<213> Homo sapiens

<400> 467

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Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
35 40 45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
50 55 60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
65 70 75 80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Met Glu
85 90 95
Ala Cys Val Ile Gln Glu Val Gly Val Glu Glu Thr Pro Leu Met Asn
100 105 110
Val Asp Ser Ile Leu Ala Val Lys Lys Tyr Phe Gln Arg Ile Thr Leu
115 120 125
Tyr Leu Thr Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
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145 150 155 160
Leu Arg Arg Lys Glu
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<210> 468

<211> 38

<212> DNA

<213> Homo sapiens

<400> 468

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<210> 469

<211> 39

<212> DNA

<213> Homo sapiens

<400> 469

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<210> 470

<211> 774

<212> PRT

<213> Homo sapiens

<400> 470

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Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
65					70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
145					150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185						190	
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
225					230					235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245					250					255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly
			260					265					270		
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile
		275					280					285			

Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu		
290						295					300						
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp		
305					310					315					320		
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser		
				325					330					335			
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly		
			340					345					350				
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val		
		355					360					365					
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys		
		370				375						380					
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu		
385					390					395					400		
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys		
				405					410					415			
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu		
			420					425					430				
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val		
		435					440					445					
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His		
	450					455					460						
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val		
465					470					475					480		
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg		
				485					490					495			
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe		
			500					505					510				
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala		
		515					520					525					
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu		
						535					540						
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys		
545					550					555					560		
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala		
				565					570					575			
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe		
			580					585					590				

Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
595 600 605

Leu Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu
610 615 620

Met Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys
625 630 635 640

Asp Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe
645 650 655

Gln Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile
660 665 670

Phe Asn Leu Phe Thr Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Asp
675 680 685

Leu Leu Asp Lys Phe Cys Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu
690 695 700

Glu Ala Cys Val Met Gln Glu Glu Arg Val Gly Glu Thr Pro Leu Met
705 710 715 720

Asn Ala Asp Ser Ile Leu Ala Val Lys Lys Tyr Phe Arg Arg Ile Thr
725 730 735

Leu Tyr Leu Thr Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val
740 745 750

Arg Ala Glu Ile Met Arg Ser Leu Ser Leu Ser Thr Asn Leu Gln Glu
755 760 765

Arg Leu Arg Arg Lys Glu
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<211> 495

<212> DNA

<213> Homo sapiens

<400> 471

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gaggagtgtg gcaaccagtt ccaaaaggct gaaaccatcc ctgtcctcca tgagatgatc 180
cagcagatct tcaacctctt taccacaaaa gattcatctg ctgcttgagg tgaggacctc 240
ctagacaaat tctgcaccga actctaccag cagctgaatg acttggaagc ctgtgtgatg 300
caggaggaga ggggtgggaga aactcccctg atgaatgcgg actccatctt ggctgtgaag 360
aaatacttcc gaagaatcac tctctatctg acagagaaga aatacagccc ttgtgcctgg 420
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ttaaggagga aggaa 495

<210> 472

<211> 165

<212> PRT

<213> Homo sapiens

<400> 472

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20 25 30
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
35 40 45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
50 55 60
Asn Leu Phe Thr Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Asp Leu
65 70 75 80
Leu Asp Lys Phe Cys Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
85 90 95
Ala Cys Val Met Gln Glu Glu Arg Val Gly Glu Thr Pro Leu Met Asn
100 105 110
Ala Asp Ser Ile Leu Ala Val Lys Lys Tyr Phe Arg Arg Ile Thr Leu
115 120 125
Tyr Leu Thr Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
130 135 140
Ala Glu Ile Met Arg Ser Leu Ser Leu Ser Thr Asn Leu Gln Glu Arg
145 150 155 160
Leu Arg Arg Lys Glu
165

<210> 473

<211> 38

<212> DNA

<213> Homo sapiens

<400> 473

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38

<210> 474

<211> 39

<212> DNA

<213> Homo sapiens

<400> 474

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39

<210> 475

<211> 774

<212> PRT

<213> Homo sapiens

<400> 475

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
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			20					25					30		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
65					70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
145					150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
225					230					235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245					250					255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly
			260					265					270		
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile
		275					280					285			
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu
	290					295					300				

Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp
 305 310 315 320
 Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser
 325 330 335
 Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly
 340 345 350
 Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val
 355 360 365
 Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 370 375 380
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 385 390 395 400
 Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
 405 410 415
 Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
 420 425 430
 Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
 435 440 445
 Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
 450 455 460
 Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
 465 470 475 480
 Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
 485 490 495
 Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
 500 505 510
 Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605

Leu Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu
 610 615 620
 Met Leu Leu Ala Gln Met Arg Lys Ile Ser Leu Phe Ser Cys Leu Lys
 625 630 635 640
 Asp Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe
 645 650 655
 Gln Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile
 660 665 670
 Phe Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr
 675 680 685
 Leu Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu
 690 695 700
 Glu Ala Cys Val Met Gln Glu Glu Arg Val Gly Glu Thr Pro Leu Met
 705 710 715 720
 Asn Val Asp Ser Ile Leu Ala Val Lys Lys Tyr Phe Arg Arg Ile Thr
 725 730 735
 Leu Tyr Leu Thr Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val
 740 745 750
 Arg Ala Glu Ile Met Arg Ser Leu Ser Leu Ser Thr Asn Leu Gln Glu
 755 760 765
 Arg Leu Arg Arg Lys Glu
 770

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 <211> 495
 <212> DNA
 <213> Homo sapiens

<400> 476
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 gaggagtgtg gcaaccagtt ccaaaaggct gaaaccatcc ctgtcctcca tgagatgatc 180
 cagcagatct tcaatctctt cagcacaag gactcatctg ctgcttggga tgagaccctc 240
 ctagacaaat tctacactga actctaccag cagctgaatg acttggaagc ctgtgtgatg 300
 caggaggaga ggggtgggaga aactcccctg atgaatgcgg actccatctt ggctgtgaag 360
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 gaggttgtca gagcagaaat catgagatcc ctctctttat caacaaactt gcaagaaaga 480
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<210> 477
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 477

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 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
 35 40 45
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
 50 55 60
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
 65 70 75 80
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
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 Ala Cys Val Met Gln Glu Glu Arg Val Gly Glu Thr Pro Leu Met Asn
 100 105 110
 Ala Asp Ser Ile Leu Ala Val Lys Lys Tyr Phe Arg Arg Ile Thr Leu
 115 120 125
 Tyr Leu Thr Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
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 Ala Glu Ile Met Arg Ser Leu Ser Leu Ser Thr Asn Leu Gln Glu Arg
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 Leu Arg Arg Lys Glu
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21

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 <213> Homo sapiens

<400> 479
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20

<210> 480
 <211> 561
 <212> DNA
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<400> 480

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 <213> Homo sapiens

<400> 481						
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 <212> DNA
 <213> Homo sapiens

<400> 482						
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<210> 483

<211> 1290

<212> DNA

<213> Homo sapiens

<400> 483

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<210> 484

<211> 1290

<212> DNA

<213> Homo sapiens

<400> 484

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<210> 485

<211> 1290

<212> DNA

<213> Homo sapiens

<400> 485

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<210> 486

<211> 1290

<212> DNA

<213> Homo sapiens

<400> 486

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aggcatgagc	agatcaccag	agctgagctc	cgactctatg	tctcctgtca	aaatcacgtg	480
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atctccgtcc	tctacaagga	tgacatgggg	gtgccccacc	tcaagtacca	ttacgagggc	1260
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<210> 487

<211> 186

<212> DNA

<213> Homo sapiens

<400> 487

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agaggatttg	ttgaacaatg	ttgtacttct	atttgttctt	tgtaccaatt	ggaaaactac	180
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<210> 488

<211> 186

<212> DNA

<213> Homo sapiens

<400> 488

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gaaagaggtt	tcttctacac	tccaaagact	aagcgtgggtg	gtgggtccagg	tagaggtaag	120
agaggatttg	ttgaacaatg	ttgtacttct	atttgttctt	tgtaccaatt	ggaaaactac	180
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<210> 489

<211> 174

<212> DNA

<213> Homo sapiens

<400> 489

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gaaagaggtt	tcttctacac	tccaaagact	ggtgggtgggc	caggtaagaa	gggtattggt	120
gaacaatggt	gtacttctat	ttgttctttg	taccaattgg	aaaactactg	taac	174

<210> 490

<211> 174

<212> DNA

<213> Homo sapiens

<400> 490

ttcgttaacc	aacacttgtg	tggttctcac	ttggttgaag	ctttgtactt	ggtttgtggt	60
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gaaagagggtt	tcttctacac	tccaaagact	ggtaggtgggc	caggtaagaa	gggtattgtt	120
gaacaatgtt	gtacttctat	ttgttctttg	taccaattgg	aaaactactg	taac	174

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<210> 492
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<400> 492						
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<210> 493
 <211> 189
 <212> DNA
 <213> Homo sapiens

<400> 493						
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<210> 494
 <211> 174
 <212> DNA
 <213> Homo sapiens

<400> 494						
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gaaagagggtt	tcttctacac	tccaaagact	ggtaggtgggc	caggtaagag	aggtattgtt	120
gaacaatgtt	gtacttctat	ttgttctttg	taccaattgg	aaaactactg	taac	174

<210> 495
 <211> 498
 <212> DNA
 <213> Homo sapiens

<400> 495						
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cctgaggaga	ttaagcagct	gcagcagttc	cagaaggagg	acgccgcatt	gaccatctat	180
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gagactattg	ttgagaacct	cctggctaata	gtctatcatc	agataaacca	tctgaagaca	300
gtcctggaag	aaaaactgga	gaaagaagat	ttcaccaggg	gaaaactcat	gagcagtctg	360
cacctgaaaa	gatattatgg	gaggattctg	cattacctga	aggccaagga	gtacagtcac	420
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<210> 496
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 <212> DNA
 <213> Homo sapiens

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caaactggta ttgttgaaca atgttgatct tctatttgggt ctttgtacca attggaaaac 180
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<211> 84
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<212> DNA
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<211> 690

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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 acccctggtg agaagggtga gaaaggagat ccagggtctta ttggtcctaa gggagacatc 240
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 aaaggagAAC ctgggagaagg tgcctatgta taccgctcag cattcagtgt gggattggag 360
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 aaccactatg atggctccac tggtaaattc cactgcaaca ttcttgggct gtactacttt 480
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 gtgctcctgc atctggaggt gggcgaccaa gtctgggtcc aggtgtatgg ggaaggagag 660
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 catgacacca actga 735

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 <211> 249
 <212> DNA
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 gctgctaagg aattcattgc ttggttggtt aagggttagac atggagaggg aacatttaca 180
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 aaaggaagg 249

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 <211> 435
 <212> DNA
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<210> 534
 <211> 231
 <212> DNA
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aacgggttat	tgttttataaa	tactactatt	gccagcattg	ctgctaaaga	agaaggggta	240
tctctcgaca	aaagacacgg	tgaagggtact	ttcactttctg	atgtttcttc	ttacttggaa	300
ggtcaagctg	ctaaggaatt	cattgcttgg	ttgggttaagg	gtagacatgc	agaggggaaca	360
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<210> 536
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 <212> DNA
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gctgctaagg	aattcattgc	ttgggttggt	aagggttagac	atgcagaggg	aacattttaca	180
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gcttggttgg	ttaagggtag	acatgcagag	ggaacattta	catcagacgt	ctcatcatat	180
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<210> 538
 <211> 93
 <212> DNA
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<210> 539
 <211> 396
 <212> DNA
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<210> 540
 <211> 108
 <212> DNA
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<210> 541
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 <213> Homo sapiens

<400> 541						
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 <212> DNA
 <213> Homo sapiens

<400> 542						
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<210> 543
 <211> 102
 <212> DNA
 <213> Homo sapiens

<400> 543						
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<210> 544
 <211> 192
 <212> DNA
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<210> 545

<211> 192
 <212> DNA
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<210> 546
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 <212> DNA
 <213> Homo sapiens

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 <212> DNA
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 <211> 221
 <212> DNA
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<210> 549
<211> 174
<212> DNA
<213> Homo sapiens

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<210> 550
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<212> DNA
<213> Homo sapiens

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<212> DNA
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<212> DNA
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gaggaagacc aagaccacat ctaccacccc cagtaa 396

<210> 553
<211> 102
<212> DNA
<213> Homo sapiens

<400> 553
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<210> 554
<211> 102
<212> DNA
<213> Homo sapiens

<400> 554
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<211> 771
<212> PRT
<213> Homo sapiens

<400> 555
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Ser Asn Phe Gln Ser Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu
35 40 45
Glu Tyr Cys Leu Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile
50 55 60
Lys Gln Leu Gln Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr
65 70 75 80
Glu Met Leu Gln Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser
85 90 95
Thr Gly Trp Asn Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr
100 105 110
His Gln Ile Asn His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys
115 120 125
Glu Asp Phe Thr Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg
130 135 140
Tyr Tyr Gly Arg Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His
145 150 155 160
Cys Ala Trp Thr Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe
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Ile Asn Arg Leu Thr Gly Tyr Leu Arg Asn Asp Ala His Lys Ser Glu
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Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu

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	210					215					220				
His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val
225					230					235					240
Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe
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Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu
			260					265					270		
Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe
		275					280					285			
Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro
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Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe
305					310					315					320
Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr
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			340					345					350		
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		355					360					365			
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	370					375					380				
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385					390					395					400
Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu
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His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys
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	450					455					460				
Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu
465					470					475					480
Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val
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Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe

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		515					520					525			
Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu
		530				535					540				
Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe
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Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln
				565					570					575	
Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala
			580					585					590		
Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr
		595					600					605			
Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys
		610				615					620				
Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser
625					630					635					640
Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser
				645					650					655	
Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro
			660					665					670		
Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe
		675					680					685			
Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu
		690				695					700				
Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys
705					710					715					720
His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp
				725					730					735	
Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr
			740					745					750		
Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala
		755					760					765			
Leu	Gly	Leu													
		770													

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<213> Homo sapiens

<400> 556

Met	Lys	Trp	Val	Thr	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ala	Gly	Val
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Ser	Gly	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu
			20					25					30		
Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr
		35					40					45			
Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val
	50					55					60				
Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys
65					70					75				80	
Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala
				85					90					95	
Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln
			100					105					110		
Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro
		115					120					125			
Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala
	130					135					140				
Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile
145					150					155					160
Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala
				165					170					175	
Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys
			180					185					190		
Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys
		195					200					205			
Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe
	210					215					220				
Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg
225					230					235					240
Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu
				245					250					255	
Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala
			260					265					270		
Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser
		275					280					285			

Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	290	295	300
Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	305	310	315
Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	325	330	335
Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	340	345	350
Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	355	360	365
Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	370	375	380
His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	385	390	395
Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	405	410	415
Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	420	425	430
Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	435	440	445
Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	450	455	460
Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	465	470	475
Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	485	490	495
Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	500	505	510
Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	515	520	525
Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	530	535	540
Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	545	550	555
Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	565	570	575
Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys	580	585	590

Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu Lys Pro Leu Gln Ser
 595 600 605
 Trp Gly Arg Gly Ser Ala Gly Gly Asn Ala His Ser Pro Leu Gly Val
 610 615 620
 Pro Gly Gly Gly Leu Pro Glu His Thr Phe Asn Leu Lys Met Phe Leu
 625 630 635 640
 Glu Asn Val Lys Val Asp Phe Leu Arg Ser Leu Asn Leu Ser Gly Val
 645 650 655
 Pro Ser Gln Asp Lys Thr Arg Val Glu Pro Pro Gln Tyr Met Ile Asp
 660 665 670
 Leu Tyr Asn Arg Tyr Thr Ser Asp Lys Ser Thr Thr Pro Ala Ser Asn
 675 680 685
 Ile Val Arg Ser Phe Ser Met Glu Asp Ala Ile Ser Ile Thr Ala Thr
 690 695 700
 Glu Asp Phe Pro Phe Gln Lys His Ile Leu Leu Phe Asn Ile Ser Ile
 705 710 715 720
 Pro Arg His Glu Gln Ile Thr Arg Ala Glu Leu Arg Leu Tyr Val Ser
 725 730 735
 Cys Gln Asn His Val Asp Pro Ser His Asp Leu Lys Gly Ser Val Val
 740 745 750
 Ile Tyr Asp Val Leu Asp Gly Thr Asp Ala Trp Asp Ser Ala Thr Glu
 755 760 765
 Thr Lys Thr Phe Leu Val Ser Gln Asp Ile Gln Asp Glu Gly Trp Glu
 770 775 780
 Thr Leu Glu Val Ser Ser Ala Val Lys Arg Trp Val Arg Ser Asp Ser
 785 790 795 800
 Thr Lys Ser Lys Asn Lys Leu Glu Val Thr Val Glu Ser His Arg Lys
 805 810 815
 Gly Cys Asp Thr Leu Asp Ile Ser Val Pro Pro Gly Ser Arg Asn Leu
 820 825 830
 Pro Phe Phe Val Val Phe Ser Asn Asp His Ser Ser Gly Thr Lys Glu
 835 840 845
 Thr Arg Leu Glu Leu Arg Glu Met Ile Ser His Glu Gln Glu Ser Val
 850 855 860
 Leu Lys Lys Leu Ser Lys Asp Gly Ser Thr Glu Ala Gly Glu Ser Ser
 865 870 875 880
 His Glu Glu Asp Thr Asp Gly His Val Ala Ala Gly Ser Thr Leu Ala
 885 890 895

Arg Arg Lys Arg Ser Ala Gly Ala Gly Ser His Cys Gln Lys Thr Ser
 900 905 910
 Leu Arg Val Asn Phe Glu Asp Ile Gly Trp Asp Ser Trp Ile Ile Ala
 915 920 925
 Pro Lys Glu Tyr Glu Ala Tyr Glu Cys Lys Gly Gly Cys Phe Phe Pro
 930 935 940
 Leu Ala Asp Asp Val Thr Pro Thr Lys His Ala Ile Val Gln Thr Leu
 945 950 955 960
 Val His Leu Lys Phe Pro Thr Lys Val Gly Lys Ala Cys Cys Val Pro
 965 970 975
 Thr Lys Leu Ser Pro Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val
 980 985 990
 Pro Thr Leu Lys Tyr His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly
 995 1000 1005
 Cys Arg
 1010

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 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Gly Val
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 Ser Gly Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu
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 Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr
 35 40 45
 Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val
 50 55 60
 Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys
 65 70 75 80
 Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala
 85 90 95
 Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln
 100 105 110
 Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro
 115 120 125
 Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala

130					135					140					
Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile
145					150					155					160
Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala
				165					170					175	
Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys
			180					185						190	
Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys
		195					200					205			
Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe
	210					215					220				
Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg
225					230					235					240
Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu
				245					250					255	
Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala
			260					265					270		
Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser
		275					280					285			
Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys
	290					295					300				
Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu
305					310					315					320
Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn
				325					330					335	
Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr
			340					345					350		
Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala
			355				360					365			
Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro
	370					375					380				
His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu
385					390					395					400
Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu
				405					410					415	
Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys
			420					425					430		
Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu

435					440					445					
Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met
450					455					460					
Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val
465					470					475					480
Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr
				485					490						495
Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp
			500					505					510		
Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His
		515					520					525			
Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln
530					535						540				
Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu
545					550					555					560
Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys
				565					570						575
Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys
			580					585					590		
Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	Leu	Lys	Pro	Leu	Gln	Ser
		595					600					605			
Trp	Gly	Arg	Gly	Ser	Ala	Gly	Gly	Asn	Ala	His	Ser	Pro	Leu	Gly	Val
610					615						620				
Pro	Gly	Gly	Gly	Leu	Pro	Glu	His	Thr	Phe	Asn	Leu	Lys	Met	Phe	Leu
625					630					635					640
Glu	Asn	Val	Lys	Val	Asp	Phe	Leu	Arg	Ser	Leu	Asn	Leu	Ser	Gly	Val
				645					650					655	
Pro	Ser	Gln	Asp	Lys	Thr	Arg	Val	Glu	Pro	Pro	Gln	Tyr	Met	Ile	Asp
			660					665					670		
Leu	Tyr	Asn	Arg	Tyr	Thr	Ser	Asp	Lys	Ser	Thr	Thr	Pro	Ala	Ser	Asn
		675					680					685			
Ile	Val	Arg	Ser	Phe	Ser	Met	Glu	Asp	Ala	Ile	Ser	Ile	Thr	Ala	Thr
		690				695					700				
Glu	Asp	Phe	Pro	Phe	Gln	Lys	His	Ile	Leu	Leu	Phe	Asn	Ile	Ser	Ile
705					710					715					720
Pro	Arg	His	Glu	Gln	Ile	Thr	Arg	Ala	Glu	Leu	Arg	Leu	Tyr	Val	Ser
				725					730					735	
Cys	Gln	Asn	His	Val	Asp	Pro	Ser	His	Asp	Leu	Lys	Gly	Ser	Val	Val

740					745					750					
Ile	Tyr	Asp	Val	Leu	Asp	Gly	Thr	Asp	Ala	Trp	Asp	Ser	Ala	Thr	Glu
		755					760					765			
Thr	Lys	Thr	Phe	Leu	Val	Ser	Gln	Asp	Ile	Gln	Asp	Glu	Gly	Trp	Glu
		770					775					780			
Thr	Leu	Glu	Val	Ser	Ser	Ala	Val	Lys	Arg	Trp	Val	Arg	Ser	Asp	Ser
		785					790					795			800
Thr	Lys	Ser	Lys	Asn	Lys	Leu	Glu	Val	Thr	Val	Glu	Ser	His	Arg	Lys
				805					810					815	
Gly	Cys	Asp	Thr	Leu	Asp	Ile	Ser	Val	Pro	Pro	Gly	Ser	Arg	Asn	Leu
				820				825						830	
Pro	Phe	Phe	Val	Val	Phe	Ser	Asn	Asp	His	Ser	Ser	Gly	Thr	Lys	Glu
				835				840						845	
Thr	Arg	Leu	Glu	Leu	Arg	Glu	Met	Ile	Ser	His	Glu	Gln	Glu	Ser	Val
							855					860			
Leu	Lys	Lys	Leu	Ser	Lys	Asp	Gly	Ser	Thr	Glu	Ala	Gly	Glu	Ser	Ser
							870					875			880
His	Glu	Glu	Asp	Thr	Asp	Gly	His	Val	Ala	Ala	Gly	Ser	Thr	Leu	Ala
				885					890					895	
Arg	Arg	Lys	Arg	Ser	Ala	Gly	Ala	Gly	Ser	His	Cys	Gln	Lys	Thr	Ser
				900				905						910	
Leu	Arg	Val	Asn	Phe	Glu	Asp	Ile	Gly	Trp	Asp	Ser	Trp	Ile	Ile	Ala
				915				920						925	
Pro	Lys	Glu	Tyr	Glu	Ala	Tyr	Glu	Cys	Lys	Gly	Gly	Cys	Phe	Phe	Pro
				930				935				940			
Leu	Ala	Asp	Asp	Val	Thr	Pro	Thr	Lys	His	Ala	Ile	Val	Gln	Thr	Leu
							950					955			960
Val	His	Leu	Lys	Phe	Pro	Thr	Lys	Val	Gly	Lys	Ala	Cys	Cys	Val	Pro
				965					970					975	
Thr	Lys	Leu	Ser	Pro	Ile	Ser	Val	Leu	Tyr	Lys	Asp	Asp	Met	Gly	Val
				980				985						990	
Pro	Thr	Leu	Lys	Tyr	His	Tyr	Glu	Gly	Met	Ser	Val	Ala	Glu	Cys	Gly
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Cys	Arg														
				1010											

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<400> 558

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Ser Gly Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu
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Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr
      35              40              45

Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val
      50              55              60

Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys
      65              70              75              80

Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala
      85              90              95

Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln
      100             105             110

Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro
      115             120             125

Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala
      130             135             140

Phe His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile
      145             150             155             160

Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala
      165             170             175

Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys
      180             185             190

Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys
      195             200             205

Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe
      210             215             220

Gly Glu Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg
      225             230             235             240

Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu
      245             250             255

Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala
      260             265             270

Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser
      275             280             285
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Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys
 290 295 300
 Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu
 305 310 315 320
 Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn
 325 330 335
 Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr
 340 345 350
 Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala
 355 360 365
 Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro
 370 375 380
 His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu
 385 390 395 400
 Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu
 405 410 415
 Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys
 420 425 430
 Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu
 435 440 445
 Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met
 450 455 460
 Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val
 465 470 475 480
 Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr
 485 490 495
 Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp
 500 505 510
 Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His
 515 520 525
 Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln
 530 535 540
 Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu
 545 550 555 560
 Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys
 565 570 575
 Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys
 580 585 590

Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu Lys Pro Leu Gln Ser
 595 600 605
 Trp Gly Arg Gly Ser Ala Gly Gly Asn Ala His Ser Pro Leu Gly Val
 610 615 620
 Pro Gly Gly Gly Leu Pro Glu His Thr Phe Asn Leu Lys Met Phe Leu
 625 630 635 640
 Glu Asn Val Lys Val Asp Phe Leu Arg Ser Leu Asn Leu Ser Gly Val
 645 650 655
 Pro Ser Gln Asp Lys Thr Arg Val Glu Pro Pro Gln Tyr Met Ile Asp
 660 665 670
 Leu Tyr Asn Arg Tyr Thr Ser Asp Lys Ser Thr Thr Pro Ala Ser Asn
 675 680 685
 Ile Val Arg Ser Phe Ser Met Glu Asp Ala Ile Ser Ile Thr Ala Thr
 690 695 700
 Glu Asp Phe Pro Phe Gln Lys His Ile Leu Leu Phe Asn Ile Ser Ile
 705 710 715 720
 Pro Arg His Glu Gln Ile Thr Arg Ala Glu Leu Arg Leu Tyr Val Ser
 725 730 735
 Cys Gln Asn His Val Asp Pro Ser His Asp Leu Lys Gly Ser Val Val
 740 745 750
 Ile Tyr Asp Val Leu Asp Gly Thr Asp Ala Trp Asp Ser Ala Thr Glu
 755 760 765
 Thr Lys Thr Phe Leu Val Ser Gln Asp Ile Gln Asp Glu Gly Trp Glu
 770 775 780
 Thr Leu Glu Val Ser Ser Ala Val Lys Arg Trp Val Arg Ser Asp Ser
 785 790 795 800
 Thr Lys Ser Lys Asn Lys Leu Glu Val Thr Val Glu Ser His Arg Lys
 805 810 815
 Gly Cys Asp Thr Leu Asp Ile Ser Val Pro Pro Gly Ser Arg Asn Leu
 820 825 830
 Pro Phe Phe Val Val Phe Ser Asn Asp His Ser Ser Gly Thr Lys Glu
 835 840 845
 Thr Arg Leu Glu Leu Arg Glu Met Ile Ser His Glu Gln Glu Ser Val
 850 855 860
 Leu Lys Lys Leu Ser Lys Asp Gly Ser Thr Glu Ala Gly Glu Ser Ser
 865 870 875 880
 His Glu Glu Asp Thr Asp Gly His Val Ala Ala Gly Ser Thr Leu Ala
 885 890 895

Arg Arg Lys Arg Ser Ala Gly Ala Gly Ser His Cys Gln Lys Thr Ser
 900 905 910
 Leu Arg Val Asn Phe Glu Asp Ile Gly Trp Asp Ser Trp Ile Ile Ala
 915 920 925
 Pro Lys Glu Tyr Glu Ala Tyr Glu Cys Lys Gly Gly Cys Phe Phe Pro
 930 935 940
 Leu Ala Asp Asp Val Thr Pro Thr Lys His Ala Ile Val Gln Thr Leu
 945 950 955 960
 Val His Leu Lys Phe Pro Thr Lys Val Gly Lys Ala Cys Cys Val Pro
 965 970 975
 Thr Lys Leu Ser Pro Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val
 980 985 990
 Pro Thr Leu Lys Tyr His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly
 995 1000 1005
 Cys Arg
 1010

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 <212> PRT
 <213> Homo sapiens

<400> 559
 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ala Gly Val
 1 5 10 15
 Ser Gly Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu
 20 25 30
 Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr
 35 40 45
 Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val
 50 55 60
 Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys
 65 70 75 80
 Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala
 85 90 95
 Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln
 100 105 110
 Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro
 115 120 125

Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	130	135	140
Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	145	150	155
Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	165	170	175
Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	180	185	190
Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	195	200	205
Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	210	215	220
Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	225	230	235
Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	245	250	255
Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	260	265	270
Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	275	280	285
Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	290	295	300
Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	305	310	315
Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	325	330	335
Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	340	345	350
Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	355	360	365
Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	370	375	380
His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	385	390	395
Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	405	410	415
Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	420	425	430

Cys Gln Asn His Val Asp Pro Ser His Asp Leu Lys Gly Ser Val Val
 740 745 750
 Ile Tyr Asp Val Leu Asp Gly Thr Asp Ala Trp Asp Ser Ala Thr Glu
 755 760 765
 Thr Lys Thr Phe Leu Val Ser Gln Asp Ile Gln Asp Glu Gly Trp Glu
 770 775 780
 Thr Leu Glu Val Ser Ser Ala Val Lys Arg Trp Val Arg Ser Asp Ser
 785 790 795 800
 Thr Lys Ser Lys Asn Lys Leu Glu Val Thr Val Glu Ser His Arg Lys
 805 810 815
 Gly Cys Asp Thr Leu Asp Ile Ser Val Pro Pro Gly Ser Arg Asn Leu
 820 825 830
 Pro Phe Phe Val Val Phe Ser Asn Asp His Ser Ser Gly Thr Lys Glu
 835 840 845
 Thr Arg Leu Glu Leu Arg Glu Met Ile Ser His Glu Gln Glu Ser Val
 850 855 860
 Leu Lys Lys Leu Ser Lys Asp Gly Ser Thr Glu Ala Gly Glu Ser Ser
 865 870 875 880
 His Glu Glu Asp Thr Asp Gly His Val Ala Ala Gly Ser Thr Leu Ala
 885 890 895
 Arg Arg Lys Arg Ser Ala Gly Ala Gly Ser His Cys Gln Lys Thr Ser
 900 905 910
 Leu Arg Val Asn Phe Glu Asp Ile Gly Trp Asp Ser Trp Ile Ile Ala
 915 920 925
 Pro Lys Glu Tyr Glu Ala Tyr Glu Cys Lys Gly Gly Cys Phe Phe Pro
 930 935 940
 Leu Ala Asp Asp Val Thr Pro Thr Lys His Ala Ile Val Gln Thr Leu
 945 950 955 960
 Val His Leu Lys Phe Pro Thr Lys Val Gly Lys Ala Cys Cys Val Pro
 965 970 975
 Thr Lys Leu Ser Pro Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val
 980 985 990
 Pro Thr Leu Lys Tyr His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly
 995 1000 1005
 Cys Arg
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<210> 560

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 <212> PRT
 <213> Homo sapiens

<400> 560

Met	Lys	Trp	Val	Thr	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Gly	Val
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Ser	Gly	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu
			20					25					30		
Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr
		35					40					45			
Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val
	50					55					60				
Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys
	65				70					75					80
Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala
				85					90					95	
Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln
			100					105						110	
Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro
		115					120					125			
Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala
	130					135					140				
Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile
145					150					155					160
Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala
				165					170					175	
Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys
			180					185						190	
Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys
		195					200					205			
Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe
	210					215					220				
Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg
225					230					235					240
Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu
				245					250					255	
Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala
			260					265					270		
Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser

275					280					285					
Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys
	290					295					300				
Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu
305					310					315					320
Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn
				325					330					335	
Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr
			340					345					350		
Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala
			355				360					365			
Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro
	370					375					380				
His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu
385					390					395					400
Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu
				405					410					415	
Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys
			420					425					430		
Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu
			435				440					445			
Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met
	450					455					460				
Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val
465					470					475					480
Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr
				485					490					495	
Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp
			500					505					510		
Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His
			515				520					525			
Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln
	530					535					540				
Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu
545					550					555					560
Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys
				565					570					575	
Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys

580					585					590					
Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	Leu	Lys	Pro	Leu	Gln	Ser
		595					600					605			
Trp	Gly	Arg	Gly	Ser	Ala	Gly	Gly	Asn	Ala	His	Ser	Pro	Leu	Gly	Val
	610					615					620				
Pro	Gly	Gly	Gly	Leu	Pro	Glu	His	Thr	Phe	Asn	Leu	Lys	Met	Phe	Leu
625					630					635					640
Glu	Asn	Val	Lys	Val	Asp	Phe	Leu	Arg	Ser	Leu	Asn	Leu	Ser	Gly	Val
				645					650					655	
Pro	Ser	Gln	Asp	Lys	Thr	Arg	Val	Glu	Pro	Pro	Gln	Tyr	Met	Ile	Asp
			660					665					670		
Leu	Tyr	Asn	Arg	Tyr	Thr	Ser	Asp	Lys	Ser	Thr	Thr	Pro	Ala	Ser	Asn
	675						680					685			
Ile	Val	Arg	Ser	Phe	Ser	Met	Glu	Asp	Ala	Ile	Ser	Ile	Thr	Ala	Thr
	690					695					700				
Glu	Asp	Phe	Pro	Phe	Gln	Lys	His	Ile	Leu	Leu	Phe	Asn	Ile	Ser	Ile
705					710					715					720
Pro	Arg	His	Glu	Gln	Ile	Thr	Arg	Ala	Glu	Leu	Arg	Leu	Tyr	Val	Ser
				725					730					735	
Cys	Gln	Asn	His	Val	Asp	Pro	Ser	His	Asp	Leu	Lys	Gly	Ser	Val	Val
			740					745					750		
Ile	Tyr	Asp	Val	Leu	Asp	Gly	Thr	Asp	Ala	Trp	Asp	Ser	Ala	Thr	Glu
	755						760					765			
Thr	Lys	Thr	Phe	Leu	Val	Ser	Gln	Asp	Ile	Gln	Asp	Glu	Gly	Trp	Glu
	770					775					780				
Thr	Leu	Glu	Val	Ser	Ser	Ala	Val	Lys	Arg	Trp	Val	Arg	Ser	Asp	Ser
785					790					795					800
Thr	Lys	Ser	Lys	Asn	Lys	Leu	Glu	Val	Thr	Val	Glu	Ser	His	Arg	Lys
				805					810					815	
Gly	Cys	Asp	Thr	Leu	Asp	Ile	Ser	Val	Pro	Pro	Gly	Ser	Arg	Asn	Leu
			820					825					830		
Pro	Phe	Phe	Val	Val	Phe	Ser	Asn	Asp	His	Ser	Ser	Gly	Thr	Lys	Glu
			835				840					845			
Thr	Arg	Leu	Glu	Leu	Arg	Glu	Met	Ile	Ser	His	Glu	Gln	Glu	Ser	Val
	850					855					860				
Leu	Lys	Lys	Leu	Ser	Lys	Asp	Gly	Ser	Thr	Glu	Ala	Gly	Glu	Ser	Ser
865					870					875					880
His	Glu	Glu	Asp	Thr	Asp	Gly	His	Val	Ala	Ala	Gly	Ser	Thr	Leu	Ala

885					890					895					
Arg	Arg	Lys	Arg	Ser	Ala	Gly	Ala	Gly	Ser	His	Cys	Gln	Lys	Thr	Ser
			900					905					910		
Leu	Arg	Val	Asn	Phe	Glu	Asp	Ile	Gly	Trp	Asp	Ser	Trp	Ile	Ile	Ala
		915					920					925			
Pro	Lys	Glu	Tyr	Glu	Ala	Tyr	Glu	Cys	Lys	Gly	Gly	Cys	Phe	Phe	Pro
	930					935					940				
Leu	Ala	Asp	Asp	Val	Thr	Pro	Thr	Lys	His	Ala	Ile	Val	Gln	Thr	Leu
945					950					955					960
Val	His	Leu	Lys	Phe	Pro	Thr	Lys	Val	Gly	Lys	Ala	Cys	Cys	Val	Pro
				965					970					975	
Thr	Lys	Leu	Ser	Pro	Ile	Ser	Val	Leu	Tyr	Lys	Asp	Asp	Met	Gly	Val
			980					985					990		
Pro	Thr	Leu	Lys	Tyr	His	Tyr	Glu	Gly	Met	Ser	Val	Ala	Glu	Cys	Gly
		995					1000					1005			
Cys	Arg														
	1010														

<210> 561
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 <213> Homo sapiens

<400> 561															
Met	Lys	Trp	Val	Thr	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Gly	Gly	Val
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Ser	Gly	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu
			20					25					30		
Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr
		35					40					45			
Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val
	50					55					60				
Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys
	65				70					75					80
Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala
				85					90					95	
Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln
		100						105					110		
Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro
		115					120					125			

418

Cys Gln Asn His Val Asp Pro Ser His Asp Leu Lys Gly Ser Val Val
 740 745 750
 Ile Tyr Asp Val Leu Asp Gly Thr Asp Ala Trp Asp Ser Ala Thr Glu
 755 760 765
 Thr Lys Thr Phe Leu Val Ser Gln Asp Ile Gln Asp Glu Gly Trp Glu
 770 775 780
 Thr Leu Glu Val Ser Ser Ala Val Lys Arg Trp Val Arg Ser Asp Ser
 785 790 795 800
 Thr Lys Ser Lys Asn Lys Leu Glu Val Thr Val Glu Ser His Arg Lys
 805 810 815
 Gly Cys Asp Thr Leu Asp Ile Ser Val Pro Pro Gly Ser Arg Asn Leu
 820 825 830
 Pro Phe Phe Val Val Phe Ser Asn Asp His Ser Ser Gly Thr Lys Glu
 835 840 845
 Thr Arg Leu Glu Leu Arg Glu Met Ile Ser His Glu Gln Glu Ser Val
 850 855 860
 Leu Lys Lys Leu Ser Lys Asp Gly Ser Thr Glu Ala Gly Glu Ser Ser
 865 870 875 880
 His Glu Glu Asp Thr Asp Gly His Val Ala Ala Gly Ser Thr Leu Ala
 885 890 895
 Arg Arg Lys Arg Ser Ala Gly Ala Gly Ser His Cys Gln Lys Thr Ser
 900 905 910
 Leu Arg Val Asn Phe Glu Asp Ile Gly Trp Asp Ser Trp Ile Ile Ala
 915 920 925
 Pro Lys Glu Tyr Glu Ala Tyr Glu Cys Lys Gly Gly Cys Phe Phe Pro
 930 935 940
 Leu Ala Asp Asp Val Thr Pro Thr Lys His Ala Ile Val Gln Thr Leu
 945 950 955 960
 Val His Leu Lys Phe Pro Thr Lys Val Gly Lys Ala Cys Cys Val Pro
 965 970 975
 Thr Lys Leu Ser Pro Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val
 980 985 990
 Pro Thr Leu Lys Tyr His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly
 995 1000 1005
 Cys Arg
 1010

<210> 562
 <211> 671
 <212> PRT
 <213> Homo sapiens

<400> 562

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Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
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Tyr Ser Arg Ser Leu Asp Lys Arg Phe Val Asn Gln His Leu Cys Gly
      20           25           30

Ser His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Glu Arg Gly Phe
      35           40           45

Phe Tyr Thr Pro Lys Thr Lys Arg Gly Gly Gly Pro Gly Arg Gly Lys
      50           55           60

Arg Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys Ser Leu Tyr Gln
      65           70           75           80

Leu Glu Asn Tyr Cys Asn Asp Ala His Lys Ser Glu Val Ala His Arg
      85           90           95

Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala
      100          105          110

Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu
      115          120          125

Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser
      130          135          140

Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu
      145          150          155          160

Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys
      165          170          175

Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys
      180          185          190

Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val
      195          200          205

Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr
      210          215          220

Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu
      225          230          235          240

Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln
      245          250          255

Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg
      260          265          270

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Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser
 275 280 285
 Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val Ala Arg
 290 295 300
 Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu
 305 310 315 320
 Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu
 325 330 335
 Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu
 340 345 350
 Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro
 355 360 365
 Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met
 370 375 380
 Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp
 385 390 395 400
 Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe
 405 410 415
 Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu
 420 425 430
 Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala
 435 440 445
 Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys
 450 455 460
 Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu
 465 470 475 480
 Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg
 485 490 495
 Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val
 500 505 510
 Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu
 515 520 525
 Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn
 530 535 540
 Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr
 545 550 555 560
 Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala
 565 570 575

Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr
 580 585 590
 Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln
 595 600 605
 Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys
 610 615 620
 Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe
 625 630 635 640
 Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu
 645 650 655
 Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 660 665 670

<210> 563
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<400> 563
 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
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 Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
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 His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45
 Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60
 Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
 65 70 75 80
 Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
 85 90 95
 Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
 100 105 110
 Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
 115 120 125
 His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
 130 135 140
 Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
 145 150 155 160

Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
 165 170 175
 Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
 180 185 190
 Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu
 195 200 205
 Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys
 210 215 220
 Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val
 225 230 235 240
 Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser
 245 250 255
 Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly
 260 265 270
 Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile
 275 280 285
 Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu
 290 295 300
 Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp
 305 310 315 320
 Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser
 325 330 335
 Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly
 340 345 350
 Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val
 355 360 365
 Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 370 375 380
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 385 390 395 400
 Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
 405 410 415
 Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
 420 425 430
 Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
 435 440 445
 Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
 450 455 460

Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
 465 470 475 480
 Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
 485 490 495
 Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
 500 505 510
 Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu
 610 615 620
 Tyr Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Lys
 625 630 635 640
 Arg Gly Gly Gly Pro Gly Arg Gly Lys Arg Gly Ile Val Glu Gln Cys
 645 650 655
 Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 660 665 670

<210> 564

<211> 667

<212> PRT

<213> Homo sapiens

<400> 564

Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Ser Leu Asp Lys Arg Phe Val Asn Gln His Leu Cys Gly
 20 25 30
 Ser His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Glu Arg Gly Phe
 35 40 45
 Phe Tyr Thr Pro Lys Thr Gly Gly Gly Pro Gly Lys Lys Gly Ile Val

50					55					60					
Glu	Gln	Cys	Cys	Thr	Ser	Ile	Cys	Ser	Leu	Tyr	Gln	Leu	Glu	Asn	Tyr
65					70					75					80
Cys	Asn	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu
				85					90					95	
Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr
			100					105					110		
Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val
			115				120						125		
Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys
						135					140				
Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala
145					150					155					160
Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln
				165					170					175	
Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro
			180					185						190	
Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala
		195					200					205			
Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile
	210					215					220				
Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala
225					230					235					240
Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys
				245					250					255	
Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys
			260					265					270		
Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe
		275					280					285			
Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg
						295					300				
Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu
305					310					315					320
Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala
				325					330					335	
Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser
			340					345					350		
Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys

355		360		365
Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu				
370		375		380
Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn				
385		390		395
				400
Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr				
		405		410
				415
Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala				
		420		425
				430
Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro				
		435		440
				445
His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu				
		450		455
				460
Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu				
465		470		475
				480
Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys				
		485		490
				495
Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu				
		500		505
				510
Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met				
		515		520
				525
Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val				
		530		535
				540
Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr				
545		550		555
				560
Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp				
		565		570
				575
Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His				
		580		585
				590
Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln				
		595		600
				605
Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu				
		610		615
				620
Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys				
625		630		635
				640
Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys				
		645		650
				655
Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu				

665

<400> 565

428

Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly
 260 265 270
 Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile
 275 280 285
 Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu
 290 295 300
 Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp
 305 310 315 320
 Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser
 325 330 335
 Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly
 340 345 350
 Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val
 355 360 365
 Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 370 375 380
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 385 390 395 400
 Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
 405 410 415
 Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
 420 425 430
 Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
 435 440 445
 Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
 450 455 460
 Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
 465 470 475 480
 Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
 485 490 495
 Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
 500 505 510
 Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560

145		150		155		160									
Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln
				165					170					175	
Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro
			180					185					190		
Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala
		195					200					205			
Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile
	210					215					220				
Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala
225					230					235					240
Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys
				245					250					255	
Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys
			260					265					270		
Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe
		275					280					285			
Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg
	290					295					300				
Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu
305					310					315					320
Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala
				325					330					335	
Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser
			340					345					350		
Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys
		355					360					365			
Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu
	370					375					380				
Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn
385					390					395					400
Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr
				405					410					415	
Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala
			420					425					430		
Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro
		435					440					445			
His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu

450	455	460
Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu 465 470 475 480		
Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys 485 490 495		
Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu 500 505 510		
Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met 515 520 525		
Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val 530 535 540		
Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr 545 550 555 560		
Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp 565 570 575		
Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His 580 585 590		
Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln 595 600 605		
Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu 610 615 620		
Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys 625 630 635 640		
Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys 645 650 655		
Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu 660 665		

<210> 567

<211> 666

<212> PRT

<213> Homo sapiens

<400> 567

Met Leu Leu Gln Ala Phe Leu Phe Leu Leu Ala Gly Phe Ala Ala Lys 1 5 10 15
Ile Ser Ala Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala 20 25 30
Leu Tyr Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr 35 40 45

Gly Tyr Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu
 50 55 60
 Gln Cys Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys
 65 70 75 80
 Asn Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly
 85 90 95
 Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu
 100 105 110
 Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr
 115 120 125
 Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp
 130 135 140
 Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr
 145 150 155 160
 Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu
 165 170 175
 Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn
 180 185 190
 Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe
 195 200 205
 His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala
 210 215 220
 Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys
 225 230 235 240
 Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala
 245 250 255
 Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala
 260 265 270
 Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly
 275 280 285
 Glu Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe
 290 295 300
 Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr
 305 310 315 320
 Lys Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp
 325 330 335
 Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile
 340 345 350

Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser
		355					360					365			
His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro
	370					375					380				
Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr
385					390					395					400
Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala
				405					410					415	
Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys
			420					425					430		
Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His
		435					440						445		
Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu
	450					455					460				
Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly
465					470					475					480
Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val
				485					490					495	
Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly
			500					505					510		
Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro
		515					520					525			
Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu
	530					535					540				
His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu
545					550					555					560
Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu
				565					570					575	
Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala
			580					585					590		
Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr
		595					600					605			
Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln
	610					615					620				
Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys
625					630					635					640
Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys	Leu
				645					650					655	

Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
660 665

<210> 568
<211> 667
<212> PRT
<213> Homo sapiens

<400> 568

Met Leu Leu Gln Ala Phe Leu Phe Leu Leu Ala Gly Phe Ala Ala Lys
1 5 10 15
Ile Ser Ala Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu
20 25 30
Ala Leu Tyr Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys
35 40 45
Thr Gly Tyr Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val
50 55 60
Glu Gln Cys Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr
65 70 75 80
Cys Asn Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu
85 90 95
Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr
100 105 110
Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val
115 120 125
Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys
130 135 140
Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala
145 150 155 160
Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln
165 170 175
Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro
180 185 190
Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala
195 200 205
Phe His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile
210 215 220
Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala
225 230 235 240
Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys

245										250					255				
Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys				
			260					265					270						
Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe				
		275					280					285							
Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg				
	290					295					300								
Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu				
305					310					315					320				
Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala				
				325					330					335					
Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser				
			340					345					350						
Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys				
		355					360					365							
Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu				
	370					375					380								
Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn				
385					390					395					400				
Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr				
				405					410					415					
Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala				
			420					425					430						
Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro				
		435				440						445							
His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu				
	450					455					460								
Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu				
465					470					475					480				
Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys				
				485					490					495					
Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu				
			500					505					510						
Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met				
		515				520						525							
Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val				
	530					535					540								
Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr				

545		550		555		560
Glu Ser Leu Val	Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp					
	565			570		575
Glu Thr Tyr Val	Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His					
	580		585			590
Ala Asp Ile Cys Thr Leu Ser	Glu Lys Glu Arg Gln Ile Lys Lys Gln					
	595	600			605	
Thr Ala Leu Val Glu Leu Val	Lys His Lys Pro Lys Ala Thr Lys Glu					
	610	615		620		
Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys						
	625	630		635		640
Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys						
	645		650			655
Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu						
	660		665			

<210> 569
 <211> 662
 <212> PRT
 <213> Homo sapiens

<400> 569
Met Leu Leu Gln Ala Phe Leu Phe Leu Leu Ala Gly Phe Ala Ala Lys
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Ile Ser Ala Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu
20 25 30
Ala Leu Tyr Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys
35 40 45
Thr Gly Gly Gly Pro Gly Lys Arg Gly Ile Val Glu Gln Cys Cys Thr
50 55 60
Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn Asp Ala His
65 70 75 80
Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe
85 90 95
Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro
100 105 110
Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys
115 120 125
Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His
130 135 140

Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	145	150	155	160
Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	165	170	175	
Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	180	185	190	
Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	195	200	205	
Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	210	215	220	
Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	225	230	235	240
Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	245	250	255	
Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	260	265	270	
Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	275	280	285	
Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	290	295	300	
Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	305	310	315	320
Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	325	330	335	
Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	340	345	350	
Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	355	360	365	
Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	370	375	380	
Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	385	390	395	400
Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	405	410	415	
Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	420	425	430	
Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	435	440	445	

Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu
 450 455 460
 Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe
 465 470 475 480
 Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser
 485 490 495
 Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser
 500 505 510
 Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp
 515 520 525
 Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr
 530 535 540
 Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn
 545 550 555 560
 Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro
 565 570 575
 Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr
 580 585 590
 Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu
 595 600 605
 Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val
 610 615 620
 Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp
 625 630 635 640
 Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser
 645 650 655
 Gln Ala Ala Leu Gly Leu
 660

<210> 570

<211> 769

<212> PRT

<213> Homo sapiens

<400> 570

Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ala Gly Val
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 Ser Gly Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu
 20 25 30
 Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr

35					40					45					
Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val
50					55					60					
Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys
65					70					75					80
Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala
				85					90					95	
Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln
			100					105					110		
Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro
			115				120					125			
Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala
						135					140				
Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile
145					150					155					160
Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala
				165					170					175	
Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys
			180					185					190		
Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys
			195				200					205			
Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe
			210			215					220				
Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg
225					230					235					240
Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu
				245					250					255	
Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala
			260					265					270		
Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser
			275				280					285			
Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys
						295					300				
Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu
305					310					315					320
Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn
				325					330					335	
Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr

340					345					350					
Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala
		355					360					365			
Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro
	370					375					380				
His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu
385					390					395					400
Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu
				405					410					415	
Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys
			420					425					430		
Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu
		435					440					445			
Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met
	450					455					460				
Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val
465					470					475					480
Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr
				485					490					495	
Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp
			500					505					510		
Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His
		515					520					525			
Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln
	530					535					540				
Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu
545					550					555					560
Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys
				565					570					575	
Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys
			580					585					590		
Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	Leu	Met	Ser	Tyr	Asn	Leu
		595					600					605			
Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln	Cys	Gln	Lys	Leu	Leu
	610					615					620				
Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu	Lys	Asp	Arg	Met	Asn
625					630					635					640
Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln	Gln	Phe	Gln	Lys	Glu

Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala
130						135					140				
Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile
145				150						155					160
Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala
			165						170					175	
Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys
			180					185						190	
Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys
		195					200					205			
Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe
	210					215						220			
Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg
225					230					235					240
Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu
				245					250					255	
Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala
			260					265						270	
Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser
		275					280						285		
Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys
	290					295					300				
Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu
305					310					315					320
Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn
				325						330				335	
Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr
			340					345						350	
Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala
			355				360						365		
Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro
	370					375					380				
His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu
385					390					395					400
Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu
				405					410					415	
Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys
			420					425						430	

Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr Ile Val Arg Val Glu
740 745 750

Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu Thr Gly Tyr Leu Arg
755 760 765

Asn

<210> 572

<211> 769

<212> PRT

<213> Homo sapiens

<400> 572

Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Gly Gly Val
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Ser Gly Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu
20 25 30

Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr
35 40 45

Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val
50 55 60

Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys
65 70 75 80

Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala
85 90 95

Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln
100 105 110

Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro
115 120 125

Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala
130 135 140

Phe His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile
145 150 155 160

Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala
165 170 175

Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys
180 185 190

Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys
195 200 205

Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	210	215	220	
Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	225	230	235	240
Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	245	250	255	
Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	260	265	270	
Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	275	280	285	
Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	290	295	300	
Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	305	310	315	320
Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	325	330	335	
Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	340	345	350	
Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	355	360	365	
Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	370	375	380	
His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	385	390	395	400
Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	405	410	415	
Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	420	425	430	
Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	435	440	445	
Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	450	455	460	
Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	465	470	475	480
Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	485	490	495	
Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	500	505	510	

Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His
 515 520 525
 Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln
 530 535 540
 Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu
 545 550 555 560
 Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys
 565 570 575
 Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys
 580 585 590
 Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu Met Ser Tyr Asn Leu
 595 600 605
 Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln Cys Gln Lys Leu Leu
 610 615 620
 Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu Lys Asp Arg Met Asn
 625 630 635 640
 Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln Gln Phe Gln Lys Glu
 645 650 655
 Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln Asn Ile Phe Ala Ile
 660 665 670
 Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn Glu Thr Ile Val Glu
 675 680 685
 Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn His Leu Lys Thr Val
 690 695 700
 Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr Arg Gly Lys Leu Met
 705 710 715 720
 Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg Ile Leu His Tyr Leu
 725 730 735
 Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr Ile Val Arg Val Glu
 740 745 750
 Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu Thr Gly Tyr Leu Arg
 755 760 765

Asn

<210> 573

<211> 623

<212> PRT

<213> Homo sapiens

<400> 573

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala	1	5	10	15
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Ala	Gly	Cys	Lys	Asn	Phe	Phe	Trp	20	25	30	
Lys	Thr	Phe	Thr	Ser	Cys	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	35	40	45	
Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	50	55	60	
Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	65	70	75	80
Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	85	90	95	
Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	100	105	110	
Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	115	120	125	
Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	130	135	140	
Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	145	150	155	160
Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	165	170	175	
Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	180	185	190	
Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	195	200	205	
Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	210	215	220	
Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	225	230	235	240
Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	245	250	255	
Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	260	265	270	
Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	275	280	285	
Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	290	295	300	

Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro
305					310					315					320
Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met
				325					330					335	
Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp
			340					345						350	
Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe
		355					360						365		
Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu
	370					375					380				
Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala
385					390					395					400
Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys
				405					410					415	
Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu
			420					425						430	
Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg
		435					440					445			
Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val
	450					455					460				
Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu
465					470					475					480
Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn
				485					490					495	
Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr
			500					505					510		
Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala
		515					520					525			
Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr
	530					535					540				
Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln
545					550					555					560
Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys
				565					570					575	
Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe
			580					585					590		
Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu
		595					600					605			

Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
610 615 620

<210> 574
<211> 654
<212> PRT
<213> Homo sapiens

<400> 574
Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
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Tyr Ser Arg Ser Leu Asp Lys Arg His Gly Glu Gly Thr Phe Thr Ser
20 25 30
Asp Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala
35 40 45
Trp Leu Val Lys Gly Arg Gly Arg Arg Asp Phe Pro Glu Glu Val Ala
50 55 60
Ile Val Glu Glu Leu Asp Ala His Lys Ser Glu Val Ala His Arg Phe
65 70 75 80
Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe
85 90 95
Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val
100 105 110
Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala
115 120 125
Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys
130 135 140
Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys
145 150 155 160
Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp
165 170 175
Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val Met
180 185 190
Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu
195 200 205
Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu
210 215 220
Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala
225 230 235 240
Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp

245										250					255				
Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu				
			260					265					270						
Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu				
		275					280					285							
Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val				
	290					295					300								
Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu				
305					310					315					320				
Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn				
				325					330					335					
Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu				
			340					345					350						
Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro				
		355					360					365							
Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val				
	370					375					380								
Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu				
385					390					395					400				
Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu				
				405					410					415					
Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala				
			420					425					430						
Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro				
		435					440					445							
Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe				
	450					455					460								
Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr				
465					470					475					480				
Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser				
				485					490					495					
Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala				
			500					505					510						
Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln				
		515					520					525							
Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys				
	530					535					540								
Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu				

545		550		555		560
Glu Val Asp	Glu Thr Tyr Val Pro Lys	Glu Phe Asn Ala	Glu Thr Phe			
	565	570	575			
Thr Phe His	Ala Asp Ile Cys Thr	Leu Ser Glu Lys	Glu Arg Gln Ile			
	580	585	590			
Lys Lys Gln	Thr Ala Leu Val	Glu Leu Val Lys His	Lys Pro Lys Ala			
	595	600	605			
Thr Lys Glu	Gln Leu Lys Ala Val	Met Asp Asp Phe	Ala Ala Phe Val			
	610	615	620			
Glu Lys Cys	Cys Lys Ala Asp Asp	Lys Glu Thr Cys	Phe Ala Glu Glu			
	625	630	635			640
Gly Lys Lys	Leu Val Ala Ala Ser	Gln Ala Ala	Leu Gly Leu			
	645	650				

<210> 575
 <211> 666
 <212> PRT
 <213> Homo sapiens

<400> 575
Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15
Tyr Ser Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala
20 25 30
Leu Tyr Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr
35 40 45
Gly Tyr Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu
50 55 60
Gln Cys Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys
65 70 75 80
Asn Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly
85 90 95
Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu
100 105 110
Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr
115 120 125
Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp
130 135 140
Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr
145 150 155 160

Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu
 165 170 175
 Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn
 180 185 190
 Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe
 195 200 205
 His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala
 210 215 220
 Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys
 225 230 235 240
 Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala
 245 250 255
 Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala
 260 265 270
 Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly
 275 280 285
 Glu Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe
 290 295 300
 Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr
 305 310 315 320
 Lys Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp
 325 330 335
 Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile
 340 345 350
 Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser
 355 360 365
 His Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro
 370 375 380
 Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr
 385 390 395 400
 Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala
 405 410 415
 Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys
 420 425 430
 Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His
 435 440 445
 Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu
 450 455 460

Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly
 465 470 475 480
 Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val
 485 490 495
 Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly
 500 505 510
 Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro
 515 520 525
 Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu
 530 535 540
 His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu
 545 550 555 560
 Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu
 565 570 575
 Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala
 580 585 590
 Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr
 595 600 605
 Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln
 610 615 620
 Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys
 625 630 635 640
 Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu
 645 650 655
 Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 660 665

<210> 576

<211> 733

<212> PRT

<213> Homo sapiens

<400> 576

Met Arg Phe Pro Ser Ile Phe Thr Ala Val Leu Phe Ala Ala Ser Ser
 1 5 10 15
 Ala Leu Ala Ala Pro Val Asn Thr Thr Thr Glu Asp Glu Thr Ala Gln
 20 25 30
 Ile Pro Ala Glu Ala Val Ile Gly Tyr Ser Asp Leu Glu Gly Asp Phe
 35 40 45
 Asp Val Ala Val Leu Pro Phe Ser Asn Ser Thr Asn Asn Gly Leu Leu

50					55					60					
Phe	Ile	Asn	Thr	Thr	Ile	Ala	Ser	Ile	Ala	Ala	Lys	Glu	Glu	Gly	Val
65					70					75					80
Ser	Leu	Asp	Lys	Arg	Phe	Val	Asn	Gln	His	Leu	Cys	Gly	Ser	His	Leu
				85					90					95	
Val	Glu	Ala	Leu	Tyr	Leu	Val	Cys	Gly	Glu	Arg	Gly	Phe	Phe	Tyr	Thr
			100					105					110		
Pro	Lys	Thr	Gly	Tyr	Gly	Ser	Ser	Ser	Arg	Arg	Ala	Pro	Gln	Thr	Gly
			115					120					125		
Ile	Val	Glu	Gln	Cys	Cys	Thr	Ser	Ile	Cys	Ser	Leu	Tyr	Gln	Leu	Glu
			130			135					140				
Asn	Tyr	Cys	Asn	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys
145					150					155					160
Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala
				165					170					175	
Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn
			180					185					190		
Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu
			195				200					205			
Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr
			210			215					220				
Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala
225					230					235					240
Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp
				245					250					255	
Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys
			260					265					270		
Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr
			275				280					285			
Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe
			290			295					300				
Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala
305					310					315					320
Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu
				325					330					335	
Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln
			340					345					350		
Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser

355					360					365					
Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr
	370					375					380				
Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu
385					390					395					400
Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln
				405					410					415	
Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu
			420					425					430		
Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala
	435						440					445			
Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys
	450					455					460				
Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr
465					470					475					480
Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg
				485					490						495
Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala
			500					505					510		
Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu
		515					520					525			
Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu
	530					535					540				
Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr
545					550					555					560
Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg
				565					570					575	
Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys
			580					585					590		
Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu
		595					600					605			
Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys
	610					615					620				
Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu
625					630					635					640
Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr
				645					650					655	
Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys

	660		665		670										
Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr
		675					680					685			
Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu
	690					695					700				
Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly
705					710					715					720
Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	Leu			
			725					730							

<210> 577
 <211> 623
 <212> PRT
 <213> Homo sapiens

<400> 577

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
65					70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
145					150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		

Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu
 195 200 205
 Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys
 210 215 220
 Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val
 225 230 235 240
 Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser
 245 250 255
 Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly
 260 265 270
 Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile
 275 280 285
 Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu
 290 295 300
 Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp
 305 310 315 320
 Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser
 325 330 335
 Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly
 340 345 350
 Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val
 355 360 365
 Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 370 375 380
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 385 390 395 400
 Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
 405 410 415
 Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
 420 425 430
 Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
 435 440 445
 Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
 450 455 460
 Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
 465 470 475 480
 Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
 485 490 495

Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
 500 505 510
 Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
 610 615 620

<210> 578
 <211> 637
 <212> PRT
 <213> Homo sapiens

<400> 578

Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Ser Leu Asp Lys Arg Ser Ala Asn Ser Asn Pro Ala Met
 20 25 30
 Ala Pro Arg Glu Arg Lys Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr
 35 40 45
 Phe Thr Ser Cys Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys
 50 55 60
 Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala
 65 70 75 80
 Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn
 85 90 95
 Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu
 100 105 110
 Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr
 115 120 125
 Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala

130	135	140
Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp 145 150 155 160		
Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys 165 170 175		
Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr 180 185 190		
Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe 195 200 205		
Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala 210 215 220		
Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu 225 230 235 240		
Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln 245 250 255		
Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser 260 265 270		
Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr 275 280 285		
Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu 290 295 300		
Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln 305 310 315 320		
Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu 325 330 335		
Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala 340 345 350		
Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys 355 360 365		
Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr 370 375 380		
Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg 385 390 395 400		
Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala 405 410 415		
Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu 420 425 430		
Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu		

435					440					445					
Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr
450					455					460					
Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg
465					470					475					480
Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys
				485					490					495	
Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu
			500					505					510		
Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys
		515					520					525			
Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu
		530				535					540				
Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr
545					550					555					560
Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys
				565					570					575	
Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr
			580					585					590		
Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu
		595					600					605			
Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly
	610					615					620				
Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	Leu			
625						630					635				

<210> 579

<211> 637

<212> PRT

<213> Homo sapiens

<400> 579

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	

Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		

His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			

Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50						55					60			

Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	65	70	75	80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	85	90	95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	100	105	110	
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	115	120	125	
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	130	135	140	
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	145	150	155	160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	165	170	175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	180	185	190	
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	195	200	205	
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	210	215	220	
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	225	230	235	240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	245	250	255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	260	265	270	
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	275	280	285	
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	290	295	300	
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	305	310	315	320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	325	330	335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	340	345	350	
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	355	360	365	

Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 370 375 380
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 385 390 395 400
 Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
 405 410 415
 Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
 420 425 430
 Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
 435 440 445
 Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
 450 455 460
 Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
 465 470 475 480
 Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
 485 490 495
 Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
 500 505 510
 Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Ser Ala Asn Ser Asn Pro Ala Met Ala Pro Arg Glu Arg Lys Ala
 610 615 620
 Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
 625 630 635

<210> 580

<211> 690

<212> PRT

<213> Homo sapiens

<400> 580

Met	Leu	Leu	Gln	Ala	Phe	Leu	Phe	Leu	Leu	Ala	Gly	Phe	Ala	Ala	Lys
1				5					10					15	
Ile	Ser	Ala	Phe	Val	Asn	Gln	His	Leu	Cys	Gly	Ser	His	Leu	Val	Glu
			20					25					30		
Ala	Leu	Tyr	Leu	Val	Cys	Gly	Glu	Arg	Gly	Phe	Phe	Tyr	Thr	Pro	Lys
		35					40					45			
Thr	Arg	Arg	Glu	Ala	Glu	Asp	Leu	Gln	Val	Gly	Gln	Val	Glu	Leu	Gly
	50					55					60				
Gly	Gly	Pro	Gly	Ala	Gly	Ser	Leu	Gln	Pro	Leu	Ala	Leu	Glu	Gly	Ser
65					70					75					80
Leu	Gln	Lys	Arg	Gly	Ile	Val	Glu	Gln	Cys	Cys	Thr	Ser	Ile	Cys	Ser
				85					90					95	
Leu	Tyr	Gln	Leu	Glu	Asn	Tyr	Cys	Asn	Asp	Ala	His	Lys	Ser	Glu	Val
			100					105					110		
Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val
		115					120					125			
Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His
	130					135					140				
Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala
145					150					155					160
Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly
				165					170					175	
Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met
			180					185					190		
Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu
		195					200					205			
Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu
	210					215					220				
Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu
225					230					235					240
Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala
			245						250					255	
Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu
			260					265					270		
Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp
		275					280					285			
Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys

290	295	300
Cys Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala 305 310 315 320		
Val Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val 325 330 335		
Ser Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His 340 345 350		
Gly Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr 355 360 365		
Ile Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys 370 375 380		
Glu Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn 385 390 395 400		
Asp Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu 405 410 415		
Ser Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu 420 425 430		
Gly Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val 435 440 445		
Val Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys 450 455 460		
Cys Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp 465 470 475 480		
Glu Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn 485 490 495		
Cys Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu 500 505 510		
Leu Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu 515 520 525		
Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys 530 535 540		
His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val 545 550 555 560		
Val Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp 565 570 575		
Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys 580 585 590		
Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn		

595		600		605
Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys				
610		615		620
Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His				
625		630		635
Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe				
		645		655
Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys				
		660		670
Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu				
		675		685
Gly Leu				
690				

<210> 581
 <211> 677
 <212> PRT
 <213> Homo sapiens

<400> 581
Met Asn Ile Phe Tyr Ile Phe Leu Phe Leu Leu Ser Phe Val Gln Gly
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Leu Glu His Thr His Arg Arg Gly Ser Leu Asp Lys Arg Phe Val Asn
20 25 30
Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr Leu Val Cys
35 40 45
Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr Gly Ser Ser
50 55 60
Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys Cys Thr Ser
65 70 75 80
Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn Asp Ala His Lys
85 90 95
Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys
100 105 110
Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe
115 120 125
Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr
130 135 140
Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr
145 150 155 160

Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	165	170	175
Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	180	185	190
Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	195	200	205
Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	210	215	220
Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	225	230	235
Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	245	250	255
Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	260	265	270
Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	275	280	285
Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	290	295	300
Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	305	310	315
Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	325	330	335
Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	340	345	350
Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	355	360	365
Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	370	375	380
Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	385	390	395
Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	405	410	415
Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	420	425	430
Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	435	440	445
Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	450	455	460

Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile
465 470 475 480
Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln
485 490 495
Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr
500 505 510
Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys
515 520 525
Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr
530 535 540
Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro
545 550 555 560
Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg
565 570 575
Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys
580 585 590
Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu
595 600 605
Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu
610 615 620
Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met
625 630 635 640
Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys
645 650 655
Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln
660 665 670
Ala Ala Leu Gly Leu
675

<210> 582

<211> 665

<212> PRT

<213> Homo sapiens

<400> 582

Met Phe Lys Ser Val Val Tyr Ser Ile Leu Ala Ala Ser Leu Ala Asn
1 5 10 15

Ala Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu
20 25 30

Tyr Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly

35					40					45					
Tyr	Gly	Ser	Ser	Ser	Arg	Arg	Ala	Pro	Gln	Thr	Gly	Ile	Val	Glu	Gln
	50					55					60				
Cys	Cys	Thr	Ser	Ile	Cys	Ser	Leu	Tyr	Gln	Leu	Glu	Asn	Tyr	Cys	Asn
65					70					75					80
Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu
				85					90					95	
Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln
			100					105					110		
Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu
		115					120					125			
Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys
	130					135					140				
Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu
145					150					155					160
Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro
				165					170					175	
Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu
			180					185					190		
Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His
		195					200					205			
Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg
	210					215					220				
Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg
225					230					235					240
Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala
				245					250					255	
Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser
			260					265					270		
Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu
		275					280					285			
Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro
	290					295					300				
Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys
305					310					315					320
Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp
				325					330					335	
Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser

340					345					350					
Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His
		355					360					365			
Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser
	370					375					380				
Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala
385					390					395					400
Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg
				405					410					415	
Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr
			420					425					430		
Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu
		435					440					445			
Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro
	450					455					460				
Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu
465					470					475					480
Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro
				485					490					495	
Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys
			500					505					510		
Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys
		515					520					525			
Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His
	530					535					540				
Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser
545					550					555					560
Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr
				565					570					575	
Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp
			580					585					590		
Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala
		595					600					605			
Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu
	610					615					620				
Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys
625					630					635					640
Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val

	645		650		655
Ala Ala Ser Gln Ala Ala Leu Gly Leu					
	660		665		
<210> 583					
<211> 733					
<212> PRT					
<213> Homo sapiens					
<400> 583					
Met Arg Phe Pro Ser Ile Phe Thr Ala Val Leu Phe Ala Ala Ser Ser					
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Ala Leu Ala Ala Pro Val Asn Thr Thr Thr Glu Asp Glu Thr Ala Gln					
	20		25		30
Ile Pro Ala Glu Ala Val Ile Gly Tyr Leu Asp Leu Glu Gly Asp Phe					
	35		40		45
Asp Val Ala Val Leu Pro Phe Ser Asn Ser Thr Asn Asn Gly Leu Leu					
	50		55		60
Phe Ile Asn Thr Thr Ile Ala Ser Ile Ala Ala Lys Glu Glu Gly Val					
	65		70		75
Ser Leu Asp Lys Arg Phe Val Asn Gln His Leu Cys Gly Ser His Leu					
		85		90	95
Val Glu Ala Leu Tyr Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr					
	100		105		110
Pro Lys Thr Gly Tyr Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly					
	115		120		125
Ile Val Glu Gln Cys Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu					
	130		135		140
Asn Tyr Cys Asn Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys					
	145		150		155
Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala					
		165		170	175
Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn					
	180		185		190
Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu					
	195		200		205
Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr					
	210		215		220
Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala					
	225		230		235
					240

Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp
 245 250 255
 Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys
 260 265 270
 Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr
 275 280 285
 Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe
 290 295 300
 Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala
 305 310 315 320
 Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu
 325 330 335
 Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln
 340 345 350
 Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser
 355 360 365
 Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr
 370 375 380
 Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu
 385 390 395 400
 Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln
 405 410 415
 Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu
 420 425 430
 Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala
 435 440 445
 Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys
 450 455 460
 Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr
 465 470 475 480
 Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg
 485 490 495
 Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala
 500 505 510
 Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu
 515 520 525
 Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu
 530 535 540

Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr
 545 550 555 560
 Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg
 565 570 575
 Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys
 580 585 590
 Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu
 595 600 605
 Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys
 610 615 620
 Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu
 625 630 635 640
 Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr
 645 650 655
 Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys
 660 665 670
 Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr
 675 680 685
 Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu
 690 695 700
 Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly
 705 710 715 720
 Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 725 730

<210> 584
 <211> 743
 <212> PRT
 <213> Homo sapiens

<400> 584
 Met Arg Phe Pro Ser Ile Phe Thr Ala Val Leu Phe Ala Ala Ser Ser
 1 5 10 15
 Ala Leu Ala Ala Pro Val Asn Thr Thr Thr Glu Asp Glu Thr Ala Gln
 20 25 30
 Ile Pro Ala Glu Ala Val Ile Gly Tyr Leu Asp Leu Glu Gly Asp Phe
 35 40 45
 Asp Val Ala Val Leu Pro Phe Ser Asn Ser Thr Asn Asn Gly Leu Leu
 50 55 60
 Phe Ile Asn Thr Thr Ile Ala Thr Ile Ala Ala Lys Glu Glu Gly Val

65	70					75					80				
Ser	Met	Ala	Lys	Arg	Glu	Glu	Ala	Glu	Ala	Glu	Ala	Glu	Pro	Lys	Phe
				85					90					95	
Val	Asn	Gln	His	Leu	Cys	Gly	Ser	His	Leu	Val	Glu	Ala	Leu	Tyr	Leu
			100					105					110		
Val	Cys	Gly	Glu	Arg	Gly	Phe	Phe	Tyr	Thr	Pro	Lys	Thr	Gly	Tyr	Gly
		115					120					125			
Ser	Ser	Ser	Arg	Arg	Ala	Pro	Gln	Thr	Gly	Ile	Val	Glu	Gln	Cys	Cys
	130					135					140				
Thr	Ser	Ile	Cys	Ser	Leu	Tyr	Gln	Leu	Glu	Asn	Tyr	Cys	Asn	Asp	Ala
145					150					155					160
His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn
				165					170					175	
Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys
			180					185					190		
Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala
		195					200					205			
Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu
	210					215					220				
His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu
225					230					235					240
Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg
				245					250					255	
Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg
			260					265					270		
Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn
		275					280					285			
Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His
	290					295					300				
Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys
305					310					315					320
Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu
				325					330					335	
Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala
			340					345					350		
Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala
		355					360					365			
Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala

370					375					380					
Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His
385					390					395					400
Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala
				405					410					415	
Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys
			420					425					430		
Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile
		435					440					445			
Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala
		450				455					460				
Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala
465					470					475					480
Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His
			485						490				495		
Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu
			500					505					510		
Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr
		515					520					525			
Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn
		530				535					540				
Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys
545					550					555					560
Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val
			565						570				575		
Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly
			580					585					590		
Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu
		595					600					605			
Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys
		610				615					620				
Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val
625					630					635					640
Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val
			645						650				655		
Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys
			660					665					670		
Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val

675	680	685
Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala		
690	695	700
Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp		
705	710	715
Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala		
	725	730
		735
Ser Gln Ala Ala Leu Gly Leu		
740		

<210> 585
 <211> 672
 <212> PRT
 <213> Homo sapiens

<400> 585
Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15
Tyr Ser Arg Ser Leu Asp Lys Arg Phe Val Asn Gln His Leu Cys Gly
20 25 30
Ser His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Glu Arg Gly Phe
35 40 45
Phe Tyr Thr Pro Lys Thr Gly Tyr Gly Ser Ser Ser Arg Arg Ala Pro
50 55 60
Gln Thr Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys Ser Leu Tyr
65 70 75 80
Gln Leu Glu Asn Tyr Cys Asn Asp Ala His Lys Ser Glu Val Ala His
85 90 95
Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile
100 105 110
Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys
115 120 125
Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu
130 135 140
Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys
145 150 155 160
Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp
165 170 175
Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His
180 185 190

Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp
 195 200 205
 Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys Lys
 210 215 220
 Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu
 225 230 235 240
 Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys
 245 250 255
 Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu
 260 265 270
 Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala
 275 280 285
 Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val Ala
 290 295 300
 Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys
 305 310 315 320
 Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp
 325 330 335
 Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys
 340 345 350
 Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys
 355 360 365
 Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu
 370 375 380
 Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys
 385 390 395 400
 Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met
 405 410 415
 Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu
 420 425 430
 Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys
 435 440 445
 Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe
 450 455 460
 Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu
 465 470 475 480
 Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val
 485 490 495

Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu
 500 505 510
 Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro
 515 520 525
 Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu
 530 535 540
 Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val
 545 550 555 560
 Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser
 565 570 575
 Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu
 580 585 590
 Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg
 595 600 605
 Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro
 610 615 620
 Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala
 625 630 635 640
 Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala
 645 650 655
 Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 660 665 670

<210> 586

<211> 671

<212> PRT

<213> Homo sapiens

<400> 586

Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Ser Leu Asp Lys Arg Phe Val Asn Gln His Leu Cys Gly
 20 25 30
 Ser His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Glu Arg Gly Phe
 35 40 45
 Phe Tyr Thr Pro Lys Thr Lys Arg Gly Gly Gly Pro Gly Arg Gly Lys
 50 55 60
 Arg Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys Ser Leu Tyr Gln
 65 70 75 80
 Leu Glu Asn Tyr Cys Asn Asp Ala His Lys Ser Glu Val Ala His Arg
 85 90 95

Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala
100 105 110
Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu
115 120 125
Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser
130 135 140
Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu
145 150 155 160
Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys
165 170 175
Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys
180 185 190
Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val
195 200 205
Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr
210 215 220
Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu
225 230 235 240
Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln
245 250 255
Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg
260 265 270
Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser
275 280 285
Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val Ala Arg
290 295 300
Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu
305 310 315 320
Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu
325 330 335
Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu
340 345 350
Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro
355 360 365
Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met
370 375 380
Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp
385 390 395 400

Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe		
				405					410					415			
Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu		
			420					425					430				
Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala		
		435					440						445				
Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys		
	450					455					460						
Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu		
465					470					475					480		
Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg		
			485					490						495			
Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val		
			500					505					510				
Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu		
		515					520					525					
Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn		
	530					535					540						
Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr		
545					550					555					560		
Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala		
			565					570						575			
Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr		
			580					585					590				
Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln		
		595					600					605					
Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys		
	610					615					620						
Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe		
625					630					635					640		
Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu		
			645					650						655			
Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	Leu			
			660					665					670				

<210> 587
 <211> 794
 <212> PRT

<213> Homo sapiens

<400> 587

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Ala	Pro	Arg	Ala	Gly	Arg	Arg	Pro
			20					25					30		
Ala	Arg	Pro	Arg	Gly	Cys	Ala	Asp	Arg	Pro	Glu	Glu	Leu	Leu	Glu	Gln
		35					40					45			
Leu	Tyr	Gly	Arg	Leu	Ala	Ala	Gly	Val	Leu	Ser	Ala	Phe	His	His	Thr
	50					55					60				
Leu	Gln	Leu	Gly	Pro	Arg	Glu	Gln	Ala	Arg	Asn	Ala	Ser	Cys	Pro	Ala
65					70					75					80
Gly	Gly	Arg	Pro	Ala	Asp	Arg	Arg	Phe	Arg	Pro	Pro	Thr	Asn	Leu	Arg
				85					90					95	
Ser	Val	Ser	Pro	Trp	Ala	Tyr	Arg	Ile	Ser	Tyr	Asp	Pro	Ala	Arg	Tyr
			100					105					110		
Pro	Arg	Tyr	Leu	Pro	Glu	Ala	Tyr	Cys	Leu	Cys	Arg	Gly	Cys	Leu	Thr
		115					120					125			
Gly	Leu	Phe	Gly	Glu	Glu	Asp	Val	Arg	Phe	Arg	Ser	Ala	Pro	Val	Tyr
	130					135					140				
Met	Pro	Thr	Val	Val	Leu	Arg	Arg	Thr	Pro	Ala	Cys	Ala	Gly	Gly	Arg
145					150					155					160
Ser	Val	Tyr	Thr	Glu	Ala	Tyr	Val	Thr	Ile	Pro	Val	Gly	Cys	Thr	Cys
				165					170					175	
Val	Pro	Glu	Pro	Glu	Lys	Asp	Ala	Asp	Ser	Ile	Asn	Ser	Ser	Ile	Asp
			180					185					190		
Lys	Gln	Gly	Ala	Lys	Leu	Leu	Leu	Gly	Pro	Asn	Asp	Ala	Pro	Ala	Gly
		195					200					205			
Pro	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly
	210					215					220				
Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu
225					230					235					240
Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr
				245					250					255	
Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp
			260					265					270		
Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr
		275					280					285			

Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu
 290 295 300
 Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn
 305 310 315 320
 Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe
 325 330 335
 His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala
 340 345 350
 Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys
 355 360 365
 Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala
 370 375 380
 Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala
 385 390 395 400
 Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly
 405 410 415
 Glu Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe
 420 425 430
 Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr
 435 440 445
 Lys Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp
 450 455 460
 Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile
 465 470 475 480
 Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser
 485 490 495
 His Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro
 500 505 510
 Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr
 515 520 525
 Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala
 530 535 540
 Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys
 545 550 555 560
 Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His
 565 570 575
 Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu
 580 585 590

Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly
 595 600 605
 Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val
 610 615 620
 Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly
 625 630 635 640
 Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro
 645 650 655
 Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu
 660 665 670
 His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu
 675 680 685
 Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu
 690 695 700
 Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala
 705 710 715 720
 Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr
 725 730 735
 Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln
 740 745 750
 Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys
 755 760 765
 Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu
 770 775 780
 Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 785 790

<210> 588

<211> 623

<212> PRT

<213> Homo sapiens

<400> 588

Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15

Tyr Ser Arg Ser Leu Asp Lys Arg Gly Gly Cys Lys Asn Phe Phe Trp
 20 25 30

Lys Thr Phe Thr Ser Cys Asp Ala His Lys Ser Glu Val Ala His Arg
 35 40 45

Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala

50						55						60				
Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	
65					70					75					80	
Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	
				85					90					95		
Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	
			100					105					110			
Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	
		115					120					125				
Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	
	130					135					140					
Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	
145					150					155					160	
Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	
				165					170					175		
Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	
			180					185					190			
Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	
		195					200					205				
Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	
	210					215					220					
Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	
225					230					235					240	
Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	
				245					250					255		
Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	
			260					265					270			
Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	
		275					280					285				
Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	
	290					295					300					
Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	
305					310					315					320	
Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	
				325					330					335		
Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	
			340					345					350			
Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	

355					360					365					
Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu
370						375					380				
Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala
385						390					395				400
Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys
				405					410					415	
Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu
			420					425					430		
Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg
		435					440					445			
Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val
	450					455					460				
Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu
465						470					475				480
Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn
				485					490					495	
Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr
			500					505					510		
Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala
		515					520					525			
Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr
	530					535					540				
Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln
545						550					555				560
Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys
				565					570					575	
Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe
			580					585					590		
Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu
		595					600					605			
Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	Leu	
	610					615					620				

<210> 589

<211> 794

<212> PRT

<213> Homo sapiens

<400> 589

Met	Lys	Trp	Val	Thr	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5				10						15	
Tyr	Ser	Arg	Gly	Val	Phe	Arg	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
65					70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
145					150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
225					230					235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245					250					255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly
			260					265					270		
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile
		275					280					285			
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu
	290					295					300				

Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	305	310	315	320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	325	330	335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	340	345	350	
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	355	360	365	
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	370	375	380	
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	385	390	395	400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	405	410	415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	420	425	430	
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	435	440	445	
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	450	455	460	
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	465	470	475	480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	485	490	495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	500	505	510	
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	515	520	525	
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	530	535	540	
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	545	550	555	560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	565	570	575	
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	580	585	590	
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	595	600	605	

Leu Ala Pro Arg Ala Gly Arg Arg Pro Ala Arg Pro Arg Gly Cys Ala
 610 615 620
 Asp Arg Pro Glu Glu Leu Leu Glu Gln Leu Tyr Gly Arg Leu Ala Ala
 625 630 635 640
 Gly Val Leu Ser Ala Phe His His Thr Leu Gln Leu Gly Pro Arg Glu
 645 650 655
 Gln Ala Arg Asn Ala Ser Cys Pro Ala Gly Gly Arg Pro Ala Asp Arg
 660 665 670
 Arg Phe Arg Pro Pro Thr Asn Leu Arg Ser Val Ser Pro Trp Ala Tyr
 675 680 685
 Arg Ile Ser Tyr Asp Pro Ala Arg Tyr Pro Arg Tyr Leu Pro Glu Ala
 690 695 700
 Tyr Cys Leu Cys Arg Gly Cys Leu Thr Gly Leu Phe Gly Glu Glu Asp
 705 710 715 720
 Val Arg Phe Arg Ser Ala Pro Val Tyr Met Pro Thr Val Val Leu Arg
 725 730 735
 Arg Thr Pro Ala Cys Ala Gly Gly Arg Ser Val Tyr Thr Glu Ala Tyr
 740 745 750
 Val Thr Ile Pro Val Gly Cys Thr Cys Val Pro Glu Pro Glu Lys Asp
 755 760 765
 Ala Asp Ser Ile Asn Ser Ser Ile Asp Lys Gln Gly Ala Lys Leu Leu
 770 775 780
 Leu Gly Pro Asn Asp Ala Pro Ala Gly Pro
 785 790

<210> 590

<211> 838

<212> PRT

<213> Homo sapiens

<400> 590

Met Lys Leu Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Ser Leu Asp Lys Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30
 His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45
 Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60

Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	65	70	75	80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	85	90	95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	100	105	110	
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	115	120	125	
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	130	135	140	
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	145	150	155	160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	165	170	175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	180	185	190	
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	195	200	205	
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	210	215	220	
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	225	230	235	240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	245	250	255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	260	265	270	
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	275	280	285	
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	290	295	300	
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	305	310	315	320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	325	330	335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	340	345	350	
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	355	360	365	

Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 370 375 380
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 385 390 395 400
 Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
 405 410 415
 Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
 420 425 430
 Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
 435 440 445
 Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
 450 455 460
 Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
 465 470 475 480
 Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
 485 490 495
 Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
 500 505 510
 Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Met Asp Leu Leu Gln Phe Leu Ala Phe Leu Phe Val Leu Leu Leu
 610 615 620
 Ser Gly Met Gly Ala Thr Gly Thr Leu Arg Thr Ser Leu Asp Pro Ser
 625 630 635 640
 Leu Glu Ile Tyr Lys Lys Met Phe Glu Val Lys Arg Arg Glu Gln Leu
 645 650 655
 Leu Ala Leu Lys Asn Leu Ala Gln Leu Asn Asp Ile His Gln Gln Tyr
 660 665 670

Lys Ile Leu Asp Val Met Leu Lys Gly Leu Phe Lys Val Leu Glu Asp
 675 680 685
 Ser Arg Thr Val Leu Thr Ala Ala Asp Val Leu Pro Asp Gly Pro Phe
 690 695 700
 Pro Gln Asp Glu Lys Leu Lys Asp Ala Phe Ser His Val Val Glu Asn
 705 710 715 720
 Thr Ala Phe Phe Gly Asp Val Val Leu Arg Phe Pro Arg Ile Val His
 725 730 735
 Tyr Tyr Phe Asp His Asn Ser Asn Trp Asn Leu Leu Ile Arg Trp Gly
 740 745 750
 Ile Ser Phe Cys Asn Gln Thr Gly Val Phe Asn Gln Gly Pro His Ser
 755 760 765
 Pro Ile Leu Ser Leu Met Ala Gln Glu Leu Gly Ile Ser Glu Lys Asp
 770 775 780
 Ser Asn Phe Gln Asn Pro Phe Lys Ile Asp Arg Thr Glu Phe Ile Pro
 785 790 795 800
 Ser Thr Asp Pro Phe Gln Lys Ala Leu Arg Glu Glu Glu Lys Arg Arg
 805 810 815
 Lys Lys Glu Glu Lys Arg Lys Glu Ile Arg Lys Gly Pro Arg Ile Ser
 820 825 830
 Arg Ser Gln Ser Glu Leu
 835

<210> 591
 <211> 1015
 <212> PRT
 <213> Homo sapiens

<400> 591

Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Ser Leu Asp Lys Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30
 His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45
 Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60
 Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
 65 70 75 80
 Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp

85					90					95					
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
			115				120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
145					150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
			195				200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
225					230					235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245					250					255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly
			260					265					270		
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile
	275					280						285			
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu
	290					295					300				
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp
305					310					315					320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser
				325					330					335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly
			340					345					350		
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val
	355					360					365				
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys
	370					375					380				
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu

385		390		395		400
Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys						
		405		410		415
Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu						
		420		425		430
Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val						
		435		440		445
Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His						
		450		455		460
Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val						
		465		470		475
Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg						
		485		490		495
Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe						
		500		505		510
Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala						
		515		520		525
Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu						
		530		535		540
Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys						
		545		550		555
Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala						
		565		570		575
Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe						
		580		585		590
Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly						
		595		600		605
Leu Met Ser Gly Ala Pro Thr Ala Gly Ala Ala Leu Met Leu Cys Ala						
		610		615		620
Ala Thr Ala Val Leu Leu Ser Ala Gln Gly Gly Pro Val Gln Ser Lys						
		625		630		635
Ser Pro Arg Phe Ala Ser Trp Asp Glu Met Asn Val Leu Ala His Gly						
		645		650		655
Leu Leu Gln Leu Gly Gln Gly Leu Arg Glu His Ala Glu Arg Thr Arg						
		660		665		670
Ser Gln Leu Ser Ala Leu Glu Arg Arg Leu Ser Ala Cys Gly Ser Ala						
		675		680		685
Cys Gln Gly Thr Glu Gly Ser Thr Asp Leu Pro Leu Ala Pro Glu Ser						

690					695					700						
Arg	Val	Asp	Pro	Glu	Val	Leu	His	Ser	Leu	Gln	Thr	Gln	Leu	Lys	Ala	
705					710					715						720
Gln	Asn	Ser	Arg	Ile	Gln	Gln	Leu	Phe	His	Lys	Val	Ala	Gln	Gln	Gln	
				725					730						735	
Arg	His	Leu	Glu	Lys	Gln	His	Leu	Arg	Ile	Gln	His	Leu	Gln	Ser	Gln	
			740					745					750			
Phe	Gly	Leu	Leu	Asp	His	Lys	His	Leu	Asp	His	Glu	Val	Ala	Lys	Pro	
		755					760					765				
Ala	Arg	Arg	Lys	Arg	Leu	Pro	Glu	Met	Ala	Gln	Pro	Val	Asp	Pro	Ala	
	770					775					780					
His	Asn	Val	Ser	Arg	Leu	His	Arg	Leu	Pro	Arg	Asp	Cys	Gln	Glu	Leu	
785					790					795					800	
Phe	Gln	Val	Gly	Glu	Arg	Gln	Ser	Gly	Leu	Phe	Glu	Ile	Gln	Pro	Gln	
				805					810						815	
Gly	Ser	Pro	Pro	Phe	Leu	Val	Asn	Cys	Lys	Met	Thr	Ser	Asp	Gly	Gly	
			820					825					830			
Trp	Thr	Val	Ile	Gln	Arg	Arg	His	Asp	Gly	Ser	Val	Asp	Phe	Asn	Arg	
		835					840					845				
Pro	Trp	Glu	Ala	Tyr	Lys	Ala	Gly	Phe	Gly	Asp	Pro	His	Gly	Glu	Phe	
	850					855					860					
Trp	Leu	Gly	Leu	Glu	Lys	Val	His	Ser	Ile	Thr	Gly	Asp	Arg	Asn	Ser	
865					870					875					880	
Arg	Leu	Ala	Val	Gln	Leu	Arg	Asp	Trp	Asp	Gly	Asn	Ala	Glu	Leu	Leu	
				885					890					895		
Gln	Phe	Ser	Val	His	Leu	Gly	Gly	Glu	Asp	Thr	Ala	Tyr	Ser	Leu	Gln	
			900					905					910			
Leu	Thr	Ala	Pro	Val	Ala	Gly	Gln	Leu	Gly	Ala	Thr	Thr	Val	Pro	Pro	
		915					920					925				
Ser	Gly	Leu	Ser	Val	Pro	Phe	Ser	Thr	Trp	Asp	Gln	Asp	His	Asp	Leu	
	930					935					940					
Arg	Arg	Asp	Lys	Asn	Cys	Ala	Lys	Ser	Leu	Ser	Gly	Gly	Trp	Trp	Phe	
945					950					955					960	
Gly	Thr	Cys	Ser	His	Ser	Asn	Leu	Asn	Gly	Gln	Tyr	Phe	Arg	Ser	Ile	
				965					970					975		
Pro	Gln	Gln	Arg	Gln	Lys	Leu	Lys	Lys	Gly	Ile	Phe	Trp	Lys	Thr	Trp	
			980					985					990			
Arg	Gly	Arg	Tyr	Tyr	Pro	Leu	Gln	Ala	Thr	Thr	Met	Leu	Ile	Gln	Pro	

995	1000	1005
Met Ala Ala Glu Ala Ala Ser		
1010	1015	
<210> 592		
<211> 767		
<212> PRT		
<213> Homo sapiens		
<400> 592		
Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala		
1	5	10 15
Tyr Ser Arg Ser Leu Asp Lys Arg Asp Ala His Lys Ser Glu Val Ala		
	20	25 30
His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu		
	35	40 45
Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val		
	50	55 60
Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp		
	65	70 75 80
Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp		
	85	90 95
Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala		
	100	105 110
Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln		
	115	120 125
His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val		
	130	135 140
Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys		
	145	150 155 160
Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro		
	165	170 175
Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys		
	180	185 190
Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu		
	195	200 205
Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys		
	210	215 220
Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val		
	225	230 235 240

Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	
				245					250					255		
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	
			260					265					270			
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	
		275					280					285				
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	
	290					295					300					
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	
305					310					315					320	
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	
				325					330					335		
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	
			340					345					350			
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	
		355					360					365				
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	
		370				375						380				
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	
385					390					395					400	
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	
				405					410					415		
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	
			420					425					430			
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	
		435					440					445				
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	
	450					455					460					
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	
465					470					475					480	
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	
				485					490					495		
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	
			500					505					510			
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	
		515					520					525				
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	
	530					535					540					

Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Met Ala Ser Arg Ser Met Arg Leu Leu Leu Leu Leu Ser Cys Leu
 610 615 620
 Ala Lys Thr Gly Val Leu Gly Asp Ile Ile Met Arg Pro Ser Cys Ala
 625 630 635 640
 Pro Gly Trp Phe Tyr His Lys Ser Asn Cys Tyr Gly Tyr Phe Arg Lys
 645 650 655
 Leu Arg Asn Trp Ser Asp Ala Glu Leu Glu Cys Gln Ser Tyr Gly Asn
 660 665 670
 Gly Ala His Leu Ala Ser Ile Leu Ser Leu Lys Glu Ala Ser Thr Ile
 675 680 685
 Ala Glu Tyr Ile Ser Gly Tyr Gln Arg Ser Gln Pro Ile Trp Ile Gly
 690 695 700
 Leu His Asp Pro Gln Lys Arg Gln Gln Trp Gln Trp Ile Asp Gly Ala
 705 710 715 720
 Met Tyr Leu Tyr Arg Ser Trp Ser Gly Lys Ser Met Gly Gly Asn Lys
 725 730 735
 His Cys Ala Glu Met Ser Ser Asn Asn Asn Phe Leu Thr Trp Ser Ser
 740 745 750
 Asn Glu Cys Asn Lys Arg Gln His Phe Leu Cys Lys Tyr Arg Pro
 755 760 765

<210> 593

<211> 669

<212> PRT

<213> Homo sapiens

<400> 593

Met Lys Val Ser Val Ala Ala Leu Ser Cys Leu Met Leu Val Thr Ala
 1 5 10 15

Leu Gly Ser Gln Ala Phe Val Asn Gln His Leu Cys Gly Ser His Leu
 20 25 30

Val Glu Ala Leu Tyr Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr

35					40					45					
Pro	Lys	Thr	Gly	Tyr	Gly	Ser	Ser	Ser	Arg	Arg	Ala	Pro	Gln	Thr	Gly
	50					55					60				
Ile	Val	Glu	Gln	Cys	Cys	Thr	Ser	Ile	Cys	Ser	Leu	Tyr	Gln	Leu	Glu
65					70					75					80
Asn	Tyr	Cys	Asn	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys
				85					90					95	
Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala
			100					105					110		
Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn
		115					120					125			
Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu
	130					135					140				
Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr
145					150					155					160
Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala
				165					170					175	
Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp
			180					185					190		
Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys
		195					200					205			
Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr
	210					215					220				
Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe
225					230					235					240
Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala
				245					250					255	
Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu
			260					265					270		
Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln
		275					280					285			
Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser
	290					295					300				
Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr
305					310					315					320
Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu
				325					330					335	
Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln

340						345						350					
Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu		
		355					360					365					
Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala		
	370					375					380						
Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys		
385					390					395					400		
Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr		
				405					410					415			
Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg		
			420				425					430					
Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala		
		435				440						445					
Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu		
	450					455					460						
Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu		
465					470					475					480		
Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr		
				485					490					495			
Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg		
			500					505					510				
Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys		
		515					520					525					
Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu		
	530					535					540						
Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys		
545					550					555					560		
Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu		
				565					570					575			
Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr		
			580					585					590				
Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys		
		595					600					605					
Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr		
	610					615					620						
Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu		
625					630					635					640		
Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly		

	645		650		655							
Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	Leu
	660						665					

<210> 594
 <211> 666
 <212> PRT
 <213> Homo sapiens

<400> 594

Met	Lys	Trp	Val	Thr	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ala	Gly	Val
1				5				10					15		
Ser	Gly	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu
			20					25					30		
Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr
			35				40					45			
Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val
	50					55					60				
Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys
65					70					75				80	
Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala
				85					90					95	
Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln
			100					105					110		
Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro
		115					120					125			
Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala
	130					135					140				
Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile
145					150					155				160	
Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala
				165				170						175	
Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys
			180					185					190		
Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys
		195					200					205			
Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe
	210					215					220				
Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg
225					230					235					240

Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu
245 250 255
Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala
260 265 270
Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser
275 280 285
Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys
290 295 300
Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu
305 310 315 320
Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn
325 330 335
Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr
340 345 350
Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala
355 360 365
Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro
370 375 380
His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu
385 390 395 400
Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu
405 410 415
Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys
420 425 430
Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu
435 440 445
Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met
450 455 460
Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val
465 470 475 480
Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr
485 490 495
Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp
500 505 510
Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His
515 520 525
Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln
530 535 540

Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu
 545 550 555 560
 Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys
 565 570 575
 Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys
 580 585 590
 Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu Phe Val Asn Gln His
 595 600 605
 Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Glu
 610 615 620
 Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr Gly Ser Ser Ser Arg
 625 630 635 640
 Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys
 645 650 655
 Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 660 665

<210> 595

<211> 719

<212> PRT

<213> Homo sapiens

<400> 595

Met Lys Leu Lys Thr Val Arg Ser Ala Val Leu Ser Ser Leu Phe Ala
 1 5 10 15
 Ser Gln Val Leu Gly Gln Pro Ile Asp Asp Thr Glu Ser Gln Thr Thr
 20 25 30
 Ser Val Asn Leu Met Ala Asp Asp Thr Glu Ser Ala Phe Ala Thr Gln
 35 40 45
 Thr Asn Ser Gly Gly Leu Asp Val Val Gly Leu Ile Ser Met Ala Lys
 50 55 60
 Arg Glu Glu Gly Glu Pro Lys Phe Val Asn Gln His Leu Cys Gly Ser
 65 70 75 80
 His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Glu Arg Gly Phe Phe
 85 90 95
 Tyr Thr Pro Lys Thr Gly Tyr Gly Ser Ser Ser Arg Arg Ala Pro Gln
 100 105 110
 Thr Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys Ser Leu Tyr Gln
 115 120 125

Leu Glu Asn Tyr Cys Asn Asp Ala His Lys Ser Glu Val Ala His Arg
 130 135 140
 Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala
 145 150 155 160
 Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu
 165 170 175
 Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser
 180 185 190
 Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu
 195 200 205
 Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys
 210 215 220
 Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys
 225 230 235 240
 Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val
 245 250 255
 Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr
 260 265 270
 Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu
 275 280 285
 Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln
 290 295 300
 Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg
 305 310 315 320
 Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser
 325 330 335
 Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val Ala Arg
 340 345 350
 Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu
 355 360 365
 Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu
 370 375 380
 Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu
 385 390 395 400
 Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro
 405 410 415
 Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met
 420 425 430

Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp
 435 440 445
 Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe
 450 455 460
 Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu
 465 470 475 480
 Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala
 485 490 495
 Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys
 500 505 510
 Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu
 515 520 525
 Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg
 530 535 540
 Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val
 545 550 555 560
 Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu
 565 570 575
 Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn
 580 585 590
 Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr
 595 600 605
 Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala
 610 615 620
 Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr
 625 630 635 640
 Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln
 645 650 655
 Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys
 660 665 670
 Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe
 675 680 685
 Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu
 690 695 700
 Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 705 710 715
 <210> 596
 <211> 719
 <212> PRT

<213> Homo sapiens

<400> 596

Met	Lys	Leu	Lys	Thr	Val	Arg	Ser	Ala	Val	Leu	Ser	Ser	Leu	Phe	Ala	
1				5					10					15		
Ser	Gln	Val	Leu	Gly	Gln	Pro	Ile	Asp	Asp	Thr	Glu	Ser	Gln	Thr	Thr	
			20					25					30			
Ser	Val	Asn	Leu	Met	Ala	Asp	Asp	Thr	Glu	Ser	Ala	Phe	Ala	Thr	Gln	
		35					40					45				
Thr	Asn	Ser	Gly	Gly	Leu	Asp	Val	Val	Gly	Leu	Ile	Ser	Met	Ala	Lys	
	50					55					60					
Arg	Glu	Glu	Gly	Glu	Pro	Lys	Phe	Val	Asn	Gln	His	Leu	Cys	Gly	Ser	
65					70					75					80	
His	Leu	Val	Glu	Ala	Leu	Tyr	Leu	Val	Cys	Gly	Glu	Arg	Gly	Phe	Phe	
				85					90					95		
Tyr	Thr	Pro	Lys	Thr	Gly	Tyr	Gly	Ser	Ser	Ser	Arg	Arg	Ala	Pro	Gln	
			100					105					110			
Thr	Gly	Ile	Val	Glu	Gln	Cys	Cys	Thr	Ser	Ile	Cys	Ser	Leu	Tyr	Gln	
		115					120					125				
Leu	Glu	Asn	Tyr	Cys	Asn	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	
	130					135					140					
Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	
145					150					155					160	
Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	
				165					170					175		
Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	
			180					185					190			
Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	
		195					200					205				
Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	
	210					215					220					
Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	
225					230					235					240	
Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	
				245					250					255		
Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	
			260					265					270			
Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	
		275					280					285				

Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln
 290 295 300
 Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg
 305 310 315 320
 Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser
 325 330 335
 Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val Ala Arg
 340 345 350
 Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu
 355 360 365
 Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu
 370 375 380
 Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu
 385 390 395 400
 Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro
 405 410 415
 Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met
 420 425 430
 Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp
 435 440 445
 Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe
 450 455 460
 Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu
 465 470 475 480
 Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala
 485 490 495
 Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys
 500 505 510
 Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu
 515 520 525
 Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg
 530 535 540
 Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val
 545 550 555 560
 Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu
 565 570 575
 Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn
 580 585 590

Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr
 595 600 605
 Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala
 610 615 620
 Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr
 625 630 635 640
 Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln
 645 650 655
 Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys
 660 665 670
 Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe
 675 680 685
 Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu
 690 695 700
 Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 705 710 715

<210> 597
 <211> 671
 <212> PRT
 <213> Homo sapiens

<400> 597
 Met Lys Leu Ala Tyr Ser Leu Leu Leu Pro Leu Ala Gly Val Ser Ala
 1 5 10 15
 Ser Val Ile Asn Tyr Lys Arg Phe Val Asn Gln His Leu Cys Gly Ser
 20 25 30
 His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Glu Arg Gly Phe Phe
 35 40 45
 Tyr Thr Pro Lys Thr Gly Tyr Gly Ser Ser Ser Arg Arg Ala Pro Gln
 50 55 60
 Thr Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys Ser Leu Tyr Gln
 65 70 75 80
 Leu Glu Asn Tyr Cys Asn Asp Ala His Lys Ser Glu Val Ala His Arg
 85 90 95
 Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala
 100 105 110
 Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu
 115 120 125
 Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser

130	135	140															
Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu		
145					150					155					160		
Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys		
				165					170					175			
Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys		
			180					185					190				
Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val		
		195					200					205					
Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr		
	210					215					220						
Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu		
225					230					235					240		
Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln		
				245					250					255			
Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg		
			260					265					270				
Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser		
		275					280					285					
Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg		
	290					295					300						
Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu		
305					310					315					320		
Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu		
				325					330					335			
Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu		
			340					345					350				
Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro		
		355					360					365					
Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met		
	370					375					380						
Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp		
385					390					395					400		
Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe		
				405					410					415			
Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu		
			420					425					430				
Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala		

435					440					445						
Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	
450					455					460						
Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	
465					470					475					480	
Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	
485					490					495						
Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	
500					505					510						
Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	
515					520					525						
Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	
530					535					540						
Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	
545					550					555					560	
Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	
565					570					575						
Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	
580					585					590						
Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	
595					600					605						
Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	
610					615					620						
Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	
625					630					635					640	
Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	
645					650					655						
Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	Leu		
660					665					670						

<210> 598

<211> 664

<212> PRT

<213> Homo sapiens

<400> 598

Met	Leu	Leu	Gln	Ala	Phe	Leu	Phe	Leu	Leu	Ala	Gly	Phe	Ala	Ala	Lys
1				5					10					15	

Ile	Ser	Ala	His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val	Ser	Ser	Tyr
			20					25					30		

Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
 35 40 45
 Arg His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu
 50 55 60
 Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Asp
 65 70 75 80
 Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu
 85 90 95
 Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln Gln
 100 105 110
 Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu Phe
 115 120 125
 Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys Ser
 130 135 140
 Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu Arg
 145 150 155 160
 Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro Glu
 165 170 175
 Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu Pro
 180 185 190
 Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His Asp
 195 200 205
 Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg Arg
 210 215 220
 His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg Tyr
 225 230 235 240
 Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala Cys
 245 250 255
 Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser Ser
 260 265 270
 Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu Arg
 275 280 285
 Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro Lys
 290 295 300
 Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys Val
 305 310 315 320
 His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp Arg
 325 330 335

Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	340	345	350
Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	355	360	365
Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	370	375	380
Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	385	390	395
Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	405	410	415
His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	420	425	430
Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	435	440	445
Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	450	455	460
Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	465	470	475
Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	485	490	495
Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	500	505	510
Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	515	520	525
Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	530	535	540
Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	545	550	555
Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	565	570	575
Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	580	585	590
Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	595	600	605
Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	610	615	620
Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	625	630	635

Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala
645 650 655

Ala Ser Gln Ala Ala Leu Gly Leu
660

<210> 599
<211> 664
<212> PRT
<213> Homo sapiens

<400> 599
Met Leu Leu Gln Ala Phe Leu Phe Leu Leu Ala Gly Phe Ala Ala Lys
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Ile Ser Ala His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr
20 25 30
Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
35 40 45
Arg His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu
50 55 60
Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Asp
65 70 75 80
Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu
85 90 95
Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln Gln
100 105 110
Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu Phe
115 120 125
Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys Ser
130 135 140
Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu Arg
145 150 155 160
Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro Glu
165 170 175
Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu Pro
180 185 190
Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His Asp
195 200 205
Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg Arg
210 215 220

His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	225	230	235	240
Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	245	250	255	
Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	260	265	270	
Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	275	280	285	
Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	290	295	300	
Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	305	310	315	320
His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	325	330	335	
Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	340	345	350	
Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	355	360	365	
Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	370	375	380	
Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	385	390	395	400
Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	405	410	415	
His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	420	425	430	
Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	435	440	445	
Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	450	455	460	
Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	465	470	475	480
Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	485	490	495	
Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	500	505	510	
Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	515	520	525	

Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His Glu
 530 535 540
 Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu
 545 550 555 560
 Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr
 565 570 575
 Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile
 580 585 590
 Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu
 595 600 605
 Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys
 610 615 620
 Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala
 625 630 635 640
 Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala
 645 650 655
 Ala Ser Gln Ala Ala Leu Gly Leu
 660

<210> 600
 <211> 663
 <212> PRT
 <213> Homo sapiens

<400> 600
 Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu
 20 25 30
 Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg
 35 40 45
 His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
 50 55 60
 Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Asp Ala
 65 70 75 80
 His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu Asn
 85 90 95
 Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys
 100 105 110
 Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu Phe Ala

115					120					125					
Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu
130						135					140				
His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu
145					150					155					160
Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg
				165					170					175	
Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg
			180					185					190		
Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn
		195					200					205			
Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His
	210					215					220				
Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys
225					230					235					240
Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu
				245					250					255	
Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala
			260					265					270		
Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala
		275					280					285			
Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala
	290					295					300				
Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His
305					310					315					320
Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala
				325					330					335	
Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys
			340					345					350		
Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile
		355					360					365			
Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala
	370					375					380				
Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala
385					390					395					400
Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His
				405					410					415	
Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu

420							425					430				
Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	
		435					440					445				
Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	
	450					455					460					
Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	
465					470					475					480	
Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	
				485					490					495		
Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	
			500				505						510			
Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	
		515					520					525				
Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	
	530					535					540					
Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	
545					550					555					560	
Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	
				565					570					575		
Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	
			580				585						590			
Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	
		595					600					605				
Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	
	610					615					620					
Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	
625					630					635					640	
Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	
				645					650					655		
Ser	Gln	Ala	Ala	Leu	Gly	Leu										
				660												

<210> 601

<211> 663

<212> PRT

<213> Homo sapiens

<400> 601

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	

Tyr	Ser	His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val	Ser	Ser	Tyr	Leu	20	25	30
Glu	Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala	Trp	Leu	Val	Lys	Gly	Arg	35	40	45
His	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val	Ser	Ser	Tyr	Leu	Glu	Gly	50	55	60
Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala	Trp	Leu	Val	Lys	Gly	Arg	Asp	Ala	65	70	80
His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	85	90	95
Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	100	105	110
Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	115	120	125
Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	130	135	140
His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	145	150	155
Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	165	170	175
Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	180	185	190
Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	195	200	205
Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	210	215	220
Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	225	230	235
Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	245	250	255
Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	260	265	270
Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	275	280	285
Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	290	295	300
Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	305	310	315
																		320

Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala
 325 330 335
 Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys
 340 345 350
 Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His Cys Ile
 355 360 365
 Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser Leu Ala
 370 375 380
 Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala
 385 390 395 400
 Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg Arg His
 405 410 415
 Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu
 420 425 430
 Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu Cys Tyr
 435 440 445
 Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro Gln Asn
 450 455 460
 Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys
 465 470 475 480
 Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro Gln Val
 485 490 495
 Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly
 500 505 510
 Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu
 515 520 525
 Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His Glu Lys
 530 535 540
 Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val
 545 550 555 560
 Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val
 565 570 575
 Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys
 580 585 590
 Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val
 595 600 605
 Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala
 610 615 620

Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp
625 630 635 640

Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala
645 650 655

Ser Gln Ala Ala Leu Gly Leu
660

<210> 602

<211> 747

<212> PRT

<213> Homo sapiens

<400> 602

Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15

Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
20 25 30

His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
35 40 45

Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
50 55 60

Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
65 70 75 80

Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
85 90 95

Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
100 105 110

Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
115 120 125

His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
130 135 140

Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
145 150 155 160

Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
165 170 175

Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
180 185 190

Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu
195 200 205

Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys

210	215	220
Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val 225 230 235 240		
Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser 245 250 255		
Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly 260 265 270		
Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile 275 280 285		
Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu 290 295 300		
Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp 305 310 315 320		
Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser 325 330 335		
Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly 340 345 350		
Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val 355 360 365		
Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys 370 375 380		
Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu 385 390 395 400		
Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys 405 410 415		
Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu 420 425 430		
Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val 435 440 445		
Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His 450 455 460		
Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val 465 470 475 480		
Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg 485 490 495		
Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe 500 505 510		
Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala		

515					520					525					
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu
530						535					540				
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys
545					550					555					560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala
				565					570					575	
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe
			580					585					590		
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly
			595				600					605			
Leu	Asp	Gly	Pro	Phe	Pro	Gln	Asp	Glu	Lys	Leu	Lys	Asp	Ala	Phe	Ser
	610					615					620				
His	Val	Val	Glu	Asn	Thr	Ala	Phe	Phe	Gly	Asp	Val	Val	Leu	Arg	Phe
625					630					635					640
Pro	Arg	Ile	Val	His	Tyr	Tyr	Phe	Asp	His	Asn	Ser	Asn	Trp	Asn	Leu
				645					650					655	
Leu	Ile	Arg	Trp	Gly	Ile	Ser	Phe	Cys	Asn	Gln	Thr	Gly	Val	Phe	Asn
			660					665					670		
Gln	Gly	Pro	His	Ser	Pro	Ile	Leu	Ser	Leu	Met	Ala	Gln	Glu	Leu	Gly
		675					680					685			
Ile	Ser	Glu	Lys	Asp	Ser	Asn	Phe	Gln	Asn	Pro	Phe	Lys	Ile	Asp	Arg
	690					695					700				
Thr	Glu	Phe	Ile	Pro	Ser	Thr	Asp	Pro	Phe	Gln	Lys	Ala	Leu	Arg	Glu
705					710					715					720
Glu	Glu	Lys	Arg	Arg	Lys	Lys	Glu	Glu	Lys	Arg	Lys	Glu	Ile	Arg	Lys
				725					730					735	
Gly	Pro	Arg	Ile	Ser	Arg	Ser	Gln	Ser	Glu	Leu					
			740					745							

<210> 603

<211> 819

<212> PRT

<213> Homo sapiens

<400> 603

Met	Lys	Trp	Val	Thr	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	

Tyr	Ser	Arg	Gly	Val	Phe	Arg	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		

Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	340	345	350	
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	355	360	365	
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	370	375	380	
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	385	390	395	400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	405	410	415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	420	425	430	
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	435	440	445	
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	450	455	460	
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	465	470	475	480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	485	490	495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	500	505	510	
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	515	520	525	
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	530	535	540	
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	545	550	555	560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	565	570	575	
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	580	585	590	
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	595	600	605	
Leu	Ala	Thr	Gly	Thr	Leu	Arg	Thr	Ser	Leu	Asp	Pro	Ser	Leu	Glu	Ile	610	615	620	
Tyr	Lys	Lys	Met	Phe	Glu	Val	Lys	Arg	Arg	Glu	Gln	Leu	Leu	Ala	Leu	625	630	635	640

Lys Asn Leu Ala Gln Leu Asn Asp Ile His Gln Gln Tyr Lys Ile Leu
 645 650 655
 Asp Val Met Leu Lys Gly Leu Phe Lys Val Leu Glu Asp Ser Arg Thr
 660 665 670
 Val Leu Thr Ala Ala Asp Val Leu Pro Asp Gly Pro Phe Pro Gln Asp
 675 680 685
 Glu Lys Leu Lys Asp Ala Phe Ser His Val Val Glu Asn Thr Ala Phe
 690 695 700
 Phe Gly Asp Val Val Leu Arg Phe Pro Arg Ile Val His Tyr Tyr Phe
 705 710 715 720
 Asp His Asn Ser Asn Trp Asn Leu Leu Ile Arg Trp Gly Ile Ser Phe
 725 730 735
 Cys Asn Gln Thr Gly Val Phe Asn Gln Gly Pro His Ser Pro Ile Leu
 740 745 750
 Ser Leu Met Ala Gln Glu Leu Gly Ile Ser Glu Lys Asp Ser Asn Phe
 755 760 765
 Gln Asn Pro Phe Lys Ile Asp Arg Thr Glu Phe Ile Pro Ser Thr Asp
 770 775 780
 Pro Phe Gln Lys Ala Leu Arg Glu Glu Glu Lys Arg Arg Lys Lys Glu
 785 790 795 800
 Glu Lys Arg Lys Glu Ile Arg Lys Gly Pro Arg Ile Ser Arg Ser Gln
 805 810 815

Ser Glu Leu

<210> 604

<211> 747

<212> PRT

<213> Homo sapiens

<400> 604

Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30
 His Arg Phe Lys Asp Leu Gly Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45
 Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60
 Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
 65 70 75 80

Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp		
				85					90					95			
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala		
			100					105					110				
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln		
		115					120					125					
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val		
	130					135					140						
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys		
145					150				155						160		
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro		
			165						170					175			
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys		
			180					185					190				
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu		
	195						200					205					
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys		
	210					215					220						
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val		
225					230				235					240			
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser		
			245					250					255				
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly		
		260						265					270				
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile		
	275						280					285					
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu		
	290					295					300						
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp		
305					310				315					320			
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser		
			325					330					335				
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly		
		340					345					350					
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val		
	355						360					365					
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys		
	370					375					380						

Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	385	390	395	400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	405	410	415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	420	425	430	
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	435	440	445	
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	450	455	460	
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	465	470	475	480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	485	490	495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	500	505	510	
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	515	520	525	
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	530	535	540	
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	545	550	555	560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	565	570	575	
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	580	585	590	
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	595	600	605	
Leu	Asp	Gly	Pro	Phe	Pro	Gln	Asp	Glu	Lys	Leu	Lys	Asp	Ala	Phe	Ser	610	615	620	
His	Val	Val	Glu	Asn	Thr	Ala	Phe	Phe	Gly	Asp	Val	Val	Leu	Arg	Phe	625	630	635	640
Pro	Arg	Ile	Val	His	Tyr	Tyr	Phe	Asp	His	Asn	Ser	Asn	Trp	Asn	Leu	645	650	655	
Leu	Ile	Arg	Trp	Gly	Ile	Ser	Phe	Cys	Asn	Gln	Thr	Gly	Val	Phe	Asn	660	665	670	
Gln	Gly	Pro	His	Ser	Pro	Ile	Leu	Ser	Leu	Met	Ala	Gln	Glu	Leu	Gly	675	680	685	

Ile Ser Glu Lys Asp Ser Asn Phe Gln Asn Pro Phe Lys Ile Asp Arg
690 695 700

Thr Glu Phe Ile Pro Ser Thr Asp Pro Phe Gln Lys Ala Leu Arg Glu
705 710 715 720

Glu Glu Lys Arg Arg Lys Lys Glu Glu Lys Arg Lys Glu Ile Arg Lys
725 730 735

Gly Pro Arg Ile Ser Arg Ser Gln Ser Glu Leu
740 745

<210> 605
<211> 819
<212> PRT
<213> Homo sapiens

<400> 605
Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15

Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
20 25 30

His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
35 40 45

Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
50 55 60

Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
65 70 75 80

Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
85 90 95

Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
100 105 110

Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
115 120 125

His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
130 135 140

Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
145 150 155 160

Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
165 170 175

Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
180 185 190

Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	195	200	205
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	210	215	220
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	225	230	235
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	245	250	255
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	260	265	270
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	275	280	285
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	290	295	300
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	305	310	315
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	325	330	335
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	340	345	350
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	355	360	365
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	370	375	380
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	385	390	395
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	405	410	415
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	420	425	430
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	435	440	445
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	450	455	460
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	465	470	475
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	485	490	495

Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe		
			500					505					510				
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala		
		515					520					525					
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu		
	530					535					540						
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys		
545					550					555					560		
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala		
				565					570					575			
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe		
			580					585					590				
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly		
		595					600					605					
Leu	Ala	Thr	Gly	Thr	Leu	Arg	Thr	Ser	Leu	Asp	Pro	Ser	Leu	Glu	Ile		
	610					615					620						
Tyr	Lys	Lys	Met	Phe	Glu	Val	Lys	Arg	Arg	Glu	Gln	Leu	Leu	Ala	Leu		
625					630					635					640		
Lys	Asn	Leu	Ala	Gln	Leu	Asn	Asp	Ile	His	Gln	Gln	Tyr	Lys	Ile	Leu		
				645					650					655			
Asp	Val	Met	Leu	Lys	Gly	Leu	Phe	Lys	Val	Leu	Glu	Asp	Ser	Arg	Thr		
			660					665					670				
Val	Leu	Thr	Ala	Ala	Asp	Val	Leu	Pro	Asp	Gly	Pro	Phe	Pro	Gln	Asp		
		675					680					685					
Glu	Lys	Leu	Lys	Asp	Ala	Phe	Ser	His	Val	Val	Glu	Asn	Thr	Ala	Phe		
	690					695					700						
Phe	Gly	Asp	Val	Val	Leu	Arg	Phe	Pro	Arg	Ile	Val	His	Tyr	Tyr	Phe		
705					710					715					720		
Asp	His	Asn	Ser	Asn	Trp	Asn	Leu	Leu	Ile	Arg	Trp	Gly	Ile	Ser	Phe		
				725					730					735			
Cys	Asn	Gln	Thr	Gly	Val	Phe	Asn	Gln	Gly	Pro	His	Ser	Pro	Ile	Leu		
			740					745					750				
Ser	Leu	Met	Ala	Gln	Glu	Leu	Gly	Ile	Ser	Glu	Lys	Asp	Ser	Asn	Phe		
		755					760					765					
Gln	Asn	Pro	Phe	Lys	Ile	Asp	Arg	Thr	Glu	Phe	Ile	Pro	Ser	Thr	Asp		
	770					775					780						
Pro	Phe	Gln	Lys	Ala	Leu	Arg	Glu	Glu	Glu	Lys	Arg	Arg	Lys	Lys	Glu		
785					790					795					800		

Glu Lys Arg Lys Glu Ile Arg Lys Gly Pro Arg Ile Ser Arg Ser Gln
805 810 815

Ser Glu Leu

<210> 606
<211> 753
<212> PRT
<213> Homo sapiens

<400> 606

Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15

Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
20 25 30

His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
35 40 45

Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
50 55 60

Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
65 70 75 80

Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
85 90 95

Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
100 105 110

Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
115 120 125

His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
130 135 140

Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
145 150 155 160

Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
165 170 175

Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
180 185 190

Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu
195 200 205

Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys
210 215 220

Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val

225		230		235		240
Ala Arg Leu Ser	Gln Arg Phe Pro Lys	Ala Glu Phe Ala Glu Val Ser				
	245	250			255	
Lys Leu Val Thr	Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly					
	260	265			270	
Asp Leu Leu Glu Cys Ala Asp	Asp Arg Ala Asp Leu Ala Lys Tyr Ile					
	275	280			285	
Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu						
	290	295			300	
Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp						
	305	310			315	320
Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser						
	325	330				335
Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly						
	340	345			350	
Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val						
	355	360			365	
Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys						
	370	375			380	
Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu						
	385	390			395	400
Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys						
	405	410			415	
Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu						
	420	425			430	
Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val						
	435	440			445	
Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His						
	450	455			460	
Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val						
	465	470			475	480
Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg						
	485	490				495
Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe						
	500	505			510	
Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala						
	515	520			525	
Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu						

530					535					540					
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys
545					550					555					560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala
				565					570					575	
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe
			580					585					590		
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly
			595				600					605			
Leu	Lys	Gly	Glu	Pro	Gly	Glu	Gly	Ala	Tyr	Val	Tyr	Arg	Ser	Ala	Phe
	610					615					620				
Ser	Val	Gly	Leu	Glu	Thr	Tyr	Val	Thr	Ile	Pro	Asn	Met	Pro	Ile	Arg
625					630					635					640
Phe	Thr	Lys	Ile	Phe	Tyr	Asn	Gln	Gln	Asn	His	Tyr	Asp	Gly	Ser	Thr
				645					650					655	
Gly	Lys	Phe	His	Cys	Asn	Ile	Pro	Gly	Leu	Tyr	Tyr	Phe	Ala	Tyr	His
			660					665					670		
Ile	Thr	Val	Tyr	Met	Lys	Asp	Val	Lys	Val	Ser	Leu	Phe	Lys	Lys	Asp
			675				680					685			
Lys	Ala	Met	Leu	Phe	Thr	Tyr	Asp	Gln	Tyr	Gln	Glu	Asn	Asn	Val	Asp
	690					695					700				
Gln	Ala	Ser	Gly	Ser	Val	Leu	Leu	His	Leu	Glu	Val	Gly	Asp	Gln	Val
705					710					715					720
Trp	Leu	Gln	Val	Tyr	Gly	Glu	Gly	Glu	Arg	Asn	Gly	Leu	Tyr	Ala	Asp
				725					730					735	
Asn	Asp	Asn	Asp	Ser	Thr	Phe	Thr	Gly	Phe	Leu	Leu	Tyr	His	Asp	Thr
			740					745					750		

Asn

<210> 607

<211> 753

<212> PRT

<213> Homo sapiens

<400> 607

Met	Lys	Trp	Val	Thr	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	

Tyr	Ser	Arg	Gly	Val	Phe	Arg	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		

His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu		
		35					40					45					
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val		
	50					55					60						
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp		
	65				70					75					80		
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp		
			85					90						95			
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala		
			100					105					110				
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln		
		115					120					125					
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val		
	130					135					140						
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys		
	145				150					155					160		
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro		
				165					170					175			
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys		
			180					185					190				
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu		
		195					200					205					
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys		
	210					215					220						
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val		
	225				230					235					240		
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser		
				245					250					255			
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly		
			260					265					270				
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile		
		275					280					285					
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu		
	290					295					300						
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp		
	305				310					315					320		
Glu	Met,	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser		
				325					330					335			

Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly
 340 345 350
 Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val
 355 360 365
 Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 370 375 380
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 385 390 395 400
 Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
 405 410 415
 Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
 420 425 430
 Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
 435 440 445
 Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
 450 455 460
 Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
 465 470 475 480
 Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
 485 490 495
 Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
 500 505 510
 Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Lys Gly Glu Pro Gly Glu Gly Ala Tyr Val Tyr Arg Ser Ala Phe
 610 615 620
 Ser Val Gly Leu Glu Thr Asn Val Thr Ile Pro Asn Met Pro Ile Arg
 625 630 635 640

Phe Thr Lys Ile Phe Tyr Asn Gln Gln Asn His Tyr Asp Gly Ser Thr
 645 650 655
 Gly Lys Phe His Cys Asn Ile Pro Gly Leu Tyr Tyr Phe Ala Tyr His
 660 665 670
 Ile Thr Val Tyr Met Lys Asp Val Lys Val Ser Leu Phe Lys Lys Asp
 675 680 685
 Lys Ala Met Leu Phe Thr Tyr Asp Gln Tyr Gln Glu Asn Asn Val Asp
 690 695 700
 Gln Ala Ser Gly Ser Val Leu Leu His Leu Glu Val Gly Asp Gln Val
 705 710 715 720
 Trp Leu Gln Val Tyr Gly Glu Gly Glu Arg Asn Gly Leu Tyr Ala Asp
 725 730 735
 Asn Asp Asn Asp Ser Thr Phe Thr Gly Phe Leu Leu Tyr His Asp Thr
 740 745 750

Asn

<210> 608
 <211> 836
 <212> PRT
 <213> Homo sapiens

<400> 608
 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30
 His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45
 Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60
 Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
 65 70 75 80
 Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
 85 90 95
 Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
 100 105 110
 Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
 115 120 125

Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	
		435						440					445			
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	
		450				455					460					
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	
		465			470					475					480	
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	
				485					490					495		
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	
			500					505					510			
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	
		515					520					525				
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	
		530				535					540					
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	
		545			550					555					560	
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	
				565					570					575		
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	
			580					585					590			
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	
		595					600					605				
Leu	Gln	Glu	Thr	Thr	Thr	Gln	Gly	Pro	Gly	Val	Leu	Leu	Pro	Leu	Pro	
		610				615					620					
Lys	Gly	Ala	Cys	Thr	Gly	Trp	Met	Ala	Gly	Ile	Pro	Gly	His	Pro	Gly	
		625			630					635					640	
His	Asn	Gly	Ala	Pro	Gly	Arg	Asp	Gly	Arg	Asp	Gly	Thr	Pro	Gly	Glu	
				645					650					655		
Lys	Gly	Glu	Lys	Gly	Asp	Pro	Gly	Leu	Ile	Gly	Pro	Lys	Gly	Asp	Ile	
			660					665					670			
Gly	Glu	Thr	Gly	Val	Pro	Gly	Ala	Glu	Gly	Pro	Arg	Gly	Phe	Pro	Gly	
		675					680					685				
Ile	Gln	Gly	Arg	Lys	Gly	Glu	Pro	Gly	Glu	Gly	Ala	Tyr	Val	Tyr	Arg	
		690				695					700					
Ser	Ala	Phe	Ser	Val	Gly	Leu	Glu	Thr	Tyr	Val	Thr	Ile	Pro	Asn	Met	
					710					715					720	
Pro	Ile	Arg	Phe	Thr	Lys	Ile	Phe	Tyr	Asn	Gln	Gln	Asn	His	Tyr	Asp	
				725					730					735		

Gly Ser Thr Gly Lys Phe His Cys Asn Ile Pro Gly Leu Tyr Tyr Phe
 740 745 750
 Ala Tyr His Ile Thr Val Tyr Met Lys Asp Val Lys Val Ser Leu Phe
 755 760 765
 Lys Lys Asp Lys Ala Met Leu Phe Thr Tyr Asp Gln Tyr Gln Glu Asn
 770 775 780
 Asn Val Asp Gln Ala Ser Gly Ser Val Leu Leu His Leu Glu Val Gly
 785 790 795 800
 Asp Gln Val Trp Leu Gln Val Tyr Gly Glu Gly Glu Arg Asn Gly Leu
 805 810 815
 Tyr Ala Asp Asn Asp Asn Asp Ser Thr Phe Thr Gly Phe Leu Leu Tyr
 820 825 830
 His Asp Thr Asn
 835

<210> 609
 <211> 668
 <212> PRT
 <213> Homo sapiens

<400> 609
 Met Lys Leu Ala Tyr Ser Leu Leu Leu Pro Leu Ala Gly Val Ser Ala
 1 5 10 15
 Ser Val Ile Asn Tyr Lys Arg His Gly Glu Gly Thr Phe Thr Ser Asp
 20 25 30
 Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp
 35 40 45
 Leu Val Lys Gly Arg His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser
 50 55 60
 Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val
 65 70 75 80
 Lys Gly Arg Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp
 85 90 95
 Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln
 100 105 110
 Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu
 115 120 125
 Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn
 130 135 140
 Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val
 145 150 155 160

Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	165	170	175
Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	180	185	190
Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	195	200	205
Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	210	215	220
Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	225	230	235
Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	245	250	255
Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	260	265	270
Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	275	280	285
Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	290	295	300
Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	305	310	315
Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	325	330	335
Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	340	345	350
Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	355	360	365
Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	370	375	380
Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	385	390	395
Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	405	410	415
Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	420	425	430
Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	435	440	445
Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	450	455	460

Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln
 465 470 475 480
 Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys
 485 490 495
 Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn
 500 505 510
 Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg
 515 520 525
 Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys
 530 535 540
 Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys
 545 550 555 560
 Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val
 565 570 575
 Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe
 580 585 590
 His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys
 595 600 605
 Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys
 610 615 620
 Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys
 625 630 635 640
 Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys
 645 650 655
 Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 660 665

<210> 610

<211> 730

<212> PRT

<213> Homo sapiens

<400> 610

Met Arg Phe Pro Ser Ile Phe Thr Ala Val Leu Phe Ala Ala Ser Ser
 1 5 10 15
 Ala Leu Ala Ala Pro Val Asn Thr Thr Thr Glu Asp Glu Thr Ala Gln
 20 25 30
 Ile Pro Ala Glu Ala Val Ile Gly Tyr Ser Asp Leu Glu Gly Asp Phe
 35 40 45

Asp Val Ala Val Leu Pro Phe Ser Asn Ser Thr Asn Asn Gly Leu Leu
 50 55 60
 Phe Ile Asn Thr Thr Ile Ala Ser Ile Ala Ala Lys Glu Glu Gly Val
 65 70 75 80
 Ser Leu Asp Lys Arg His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser
 85 90 95
 Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val
 100 105 110
 Lys Gly Arg His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr
 115 120 125
 Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
 130 135 140
 Arg Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly
 145 150 155 160
 Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu
 165 170 175
 Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr
 180 185 190
 Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp
 195 200 205
 Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr
 210 215 220
 Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu
 225 230 235 240
 Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn
 245 250 255
 Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe
 260 265 270
 His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala
 275 280 285
 Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys
 290 295 300
 Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala
 305 310 315 320
 Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala
 325 330 335
 Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly
 340 345 350

Glu Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe
 355 360 365
 Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr
 370 375 380
 Lys Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp
 385 390 395 400
 Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile
 405 410 415
 Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser
 420 425 430
 His Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro
 435 440 445
 Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr
 450 455 460
 Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala
 465 470 475 480
 Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys
 485 490 495
 Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His
 500 505 510
 Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu
 515 520 525
 Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly
 530 535 540
 Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val
 545 550 555 560
 Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly
 565 570 575
 Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro
 580 585 590
 Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu
 595 600 605
 His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu
 610 615 620
 Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu
 625 630 635 640
 Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala
 645 650 655

Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr
 660 665 670
 Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln
 675 680 685
 Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys
 690 695 700
 Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu
 705 710 715 720
 Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 725 730

<210> 611
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 <212> PRT
 <213> Homo sapiens

<400> 611
 Met Phe Lys Ser Val Val Tyr Ser Ile Leu Ala Ala Ser Leu Ala Asn
 1 5 10 15
 Ala His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu
 20 25 30
 Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg His
 35 40 45
 Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly Gln
 50 55 60
 Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Asp Ala His
 65 70 75 80
 Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe
 85 90 95
 Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro
 100 105 110
 Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys
 115 120 125
 Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His
 130 135 140
 Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr
 145 150 155 160
 Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn
 165 170 175
 Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu

180					185					190					
Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu
		195					200					205			
Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro
	210					215					220				
Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala
225					230					235					240
Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu
				245					250					255	
Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys
			260					265					270		
Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe
		275					280					285			
Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu
	290					295					300				
Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr
305					310					315					320
Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp
				325					330					335	
Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu
			340					345					350		
Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala
		355					360					365			
Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala
	370					375					380				
Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys
385					390					395					400
Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro
				405					410					415	
Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr
			420					425					430		
Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala
		435					440					445			
Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu
	450					455					460				
Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe
465					470					475					480
Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser

Ser	Leu	Asp	Lys	Arg	His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val	Ser	
				85					90					95		
Ser	Tyr	Leu	Glu	Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala	Trp	Leu	Val	
			100					105					110			
Lys	Gly	Arg	His	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val	Ser	Ser	Tyr	
		115					120					125				
Leu	Glu	Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala	Trp	Leu	Val	Lys	Gly	
	130					135					140					
Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	
145					150					155					160	
Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	
				165					170					175		
Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	
			180					185					190			
Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	
		195					200					205				
Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	
		210				215					220					
Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	
225					230					235					240	
Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	
			245						250					255		
Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	
			260					265					270			
His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	
		275					280					285				
Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	
		290				295					300					
Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	
305					310					315					320	
Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	
				325					330					335		
Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	
			340					345					350			
Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	
		355					360					365				
Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	
		370				375						380				

Lys Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp
 385 390 395 400
 Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile
 405 410 415
 Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser
 420 425 430
 His Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro
 435 440 445
 Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr
 450 455 460
 Ala Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala
 465 470 475 480
 Arg Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys
 485 490 495
 Thr Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His
 500 505 510
 Glu Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu
 515 520 525
 Pro Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly
 530 535 540
 Glu Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val
 545 550 555 560
 Pro Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly
 565 570 575
 Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro
 580 585 590
 Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu
 595 600 605
 His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu
 610 615 620
 Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu
 625 630 635 640
 Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala
 645 650 655
 Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr
 660 665 670
 Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln
 675 680 685

Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys
 690 695 700
 Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu
 705 710 715 720
 Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 725 730

<210> 613
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 <212> PRT
 <213> Homo sapiens

<400> 613
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 Ser Val Ile Asn Tyr Lys Arg His Gly Glu Gly Thr Phe Thr Ser Asp
 20 25 30
 Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp
 35 40 45
 Leu Val Lys Gly Arg His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser
 50 55 60
 Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val
 65 70 75 80
 Lys Gly Arg Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp
 85 90 95
 Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln
 100 105 110
 Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu
 115 120 125
 Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn
 130 135 140
 Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val
 145 150 155 160
 Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys
 165 170 175
 Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn
 180 185 190
 Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr
 195 200 205

Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu
210						215					220				
Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe
225					230					235					240
Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp
				245					250					255	
Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly
			260					265					270		
Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys
		275					280					285			
Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln
290						295					300				
Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp
305					310					315					320
Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys
				325					330					335	
Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp
			340					345					350		
Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu
		355					360					365			
Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp
	370					375					380				
Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys
385					390					395					400
Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu
				405					410					415	
Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu
			420					425					430		
Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp
		435					440					445			
Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val
	450					455					460				
Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln
465					470					475					480
Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys
				485					490					495	
Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn
			500					505					510		

Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg
 515 520 525
 Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys
 530 535 540
 Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys
 545 550 555 560
 Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val
 565 570 575
 Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe
 580 585 590
 His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys
 595 600 605
 Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys
 610 615 620
 Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys
 625 630 635 640
 Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys
 645 650 655
 Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
 660 665

<210> 614
 <211> 662
 <212> PRT
 <213> Homo sapiens

<400> 614
 Met Phe Lys Ser Val Val Tyr Ser Ile Leu Ala Ala Ser Leu Ala Asn
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 Ala His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu
 20 25 30
 Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg His
 35 40 45
 Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly Gln
 50 55 60
 Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Asp Ala His
 65 70 75 80
 Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe
 85 90 95
 Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro

100					105					110					
Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys
		115					120					125			
Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His
	130					135					140				
Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr
145					150					155					160
Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn
				165					170					175	
Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu
			180					185					190		
Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu
		195					200					205			
Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro
	210					215					220				
Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala
225					230					235					240
Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu
				245					250					255	
Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys
			260					265					270		
Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe
		275					280					285			
Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu
	290					295					300				
Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr
305					310					315					320
Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp
				325					330					335	
Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu
			340					345					350		
Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala
		355					360					365			
Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala
	370					375					380				
Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys
385					390					395					400
Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro

405								410				415			
Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr
			420					425					430		
Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala
		435					440					445			
Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu
	450					455					460				
Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe
465					470					475					480
Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser
			485						490					495	
Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser
			500					505					510		
Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp
		515					520					525			
Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr
	530					535					540				
Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn
545					550					555					560
Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro
				565					570					575	
Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr
			580					585					590		
Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu
		595					600					605			
Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val
	610					615					620				
Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp
625					630					635					640
Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser
				645					650					655	
Gln	Ala	Ala	Leu	Gly	Leu										
			660												

<210> 615

<211> 640

<212> PRT

<213> Homo sapiens

<400> 615

Met	Lys	Trp	Val	Thr	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
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Tyr	Ser	Arg	Gly	Val	Phe	Arg	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
65					70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
145					150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
225					230					235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245					250					255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly
			260					265					270		
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile
		275					280					285			
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu
	290					295					300				

Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	
305					310					315					320	
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	
				325					330					335		
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	
			340					345					350			
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	
		355					360					365				
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	
		370				375					380					
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	
385					390					395					400	
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	
				405					410					415		
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	
			420					425					430			
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	
		435					440					445				
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	
	450					455					460					
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	
465					470					475					480	
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	
				485					490					495		
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	
			500					505					510			
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	
		515					520					525				
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	
						535					540					
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	
545					550					555					560	
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	
				565					570					575		
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	
			580					585					590			
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	
		595					600					605				

Leu Glu Ala Glu Asp Leu Gln Val Gly Gln Val Glu Leu Gly Gly Gly
610 615 620

Pro Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu Gly Ser Leu Gln
625 630 635 640

<210> 616
<211> 740
<212> PRT
<213> Homo sapiens

<400> 616

Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15

Tyr Ser Arg Ser Leu Asp Lys Arg Asp Ala His Lys Ser Glu Val Ala
20 25 30

His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
35 40 45

Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
50 55 60

Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
65 70 75 80

Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
85 90 95

Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
100 105 110

Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
115 120 125

His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
130 135 140

Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
145 150 155 160

Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
165 170 175

Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
180 185 190

Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu
195 200 205

Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys
210 215 220

Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	225	230	235	240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	245	250	255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	260	265	270	
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	275	280	285	
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	290	295	300	
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	305	310	315	320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	325	330	335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	340	345	350	
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	355	360	365	
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	370	375	380	
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	385	390	395	400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	405	410	415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	420	425	430	
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	435	440	445	
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	450	455	460	
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	465	470	475	480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	485	490	495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	500	505	510	
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	515	520	525	

Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605
 Leu Val Pro Ala Pro Lys Val Pro Ile Lys Met Gln Val Lys His Trp
 610 615 620
 Pro Ser Glu Gln Asp Pro Glu Lys Ala Trp Gly Ala Arg Val Val Glu
 625 630 635 640
 Pro Pro Glu Lys Asp Asp Gln Leu Val Val Leu Phe Pro Val Gln Lys
 645 650 655
 Pro Lys Leu Leu Thr Thr Glu Glu Lys Pro Arg Gly Gln Gly Arg Gly
 660 665 670
 Pro Ile Leu Pro Gly Thr Lys Ala Trp Met Glu Thr Glu Asp Thr Leu
 675 680 685
 Gly Arg Val Leu Ser Pro Glu Pro Asp His Asp Ser Leu Tyr His Pro
 690 695 700
 Pro Pro Glu Glu Asp Gln Gly Glu Glu Arg Pro Arg Leu Trp Val Met
 705 710 715 720
 Pro Asn His Gln Val Leu Leu Gly Pro Glu Glu Asp Gln Asp His Ile
 725 730 735
 Tyr His Pro Gln
 740

<210> 617

<211> 645

<212> PRT

<213> Homo sapiens

<400> 617

Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15

Tyr Ser Arg Ser Leu Asp Lys Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30

His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu

35					40					45					
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
	65				70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
	145				150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
	225				230					235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245					250					255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly
			260					265					270		
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile
	275						280					285			
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu
	290					295					300				
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp
	305				310					315					320
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser
	-			325					330					335	
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly

340					345					350					
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val
		355					360					365			
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys
	370					375					380				
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu
385					390					395					400
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys
			405					410						415	
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu
		420					425						430		
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val
	435						440					445			
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His
	450					455					460				
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val
465					470					475					480
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg
			485					490						495	
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe
		500					505						510		
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala
	515						520					525			
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu
	530					535					540				
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys
545					550					555					560
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala
				565					570					575	
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe
		580						585					590		
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly
	595						600					605			
Leu	Tyr	Pro	Ile	Lys	Pro	Glu	Ala	Pro	Gly	Glu	Asp	Ala	Ser	Pro	Glu
	610					615					620				
Glu	Leu	Asn	Arg	Tyr	Tyr	Ala	Ser	Leu	Arg	His	Tyr	Leu	Asn	Leu	Val
625					630					635					640
Thr	Arg	Gln	Arg	Tyr											

645

<210> 618
 <211> 643
 <212> PRT
 <213> Homo sapiens

<400> 618

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
	65				70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
	145				150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
	225				230					235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245					250					255	

Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly
 260 265 270
 Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile
 275 280 285
 Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu
 290 295 300
 Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp
 305 310 315 320
 Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser
 325 330 335
 Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly
 340 345 350
 Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val
 355 360 365
 Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 370 375 380
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 385 390 395 400
 Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
 405 410 415
 Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
 420 425 430
 Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
 435 440 445
 Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
 450 455 460
 Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
 465 470 475 480
 Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
 485 490 495
 Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
 500 505 510
 Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560

Leu Gln His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro
 165 170 175
 Glu Val Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe
 180 185 190
 Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr
 195 200 205
 Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr
 210 215 220
 Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu
 225 230 235 240
 Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu
 245 250 255
 Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp
 260 265 270
 Ala Val Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu
 275 280 285
 Val Ser Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys
 290 295 300
 His Gly Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys
 305 310 315 320
 Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys
 325 330 335
 Cys Glu Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu
 340 345 350
 Asn Asp Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val
 355 360 365
 Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe
 370 375 380
 Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser
 385 390 395 400
 Val Val Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu
 405 410 415
 Lys Cys Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe
 420 425 430
 Asp Glu Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln
 435 440 445
 Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala
 450 455 460

Leu Leu Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr
 465 470 475 480
 Leu Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys
 485 490 495
 Lys His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser
 500 505 510
 Val Val Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser
 515 520 525
 Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro
 530 535 540
 Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe
 545 550 555 560
 Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu
 565 570 575
 Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys
 580 585 590
 His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp
 595 600 605
 Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr
 610 615 620
 Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala
 625 630 635 640
 Leu Gly Leu

<210> 620
 <211> 643
 <212> PRT
 <213> Homo sapiens

<400> 620
 Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Ser Leu Asp Lys Arg Ile Lys Pro Glu Ala Pro Gly Glu
 20 25 30
 Asp Ala Ser Pro Glu Glu Leu Asn Arg Tyr Tyr Ala Ser Leu Arg His
 35 40 45
 Tyr Leu Asn Leu Val Thr Arg Gln Arg Tyr Asp Ala His Lys Ser Glu
 50 55 60
 Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu

65	70					75					80				
Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp
				85					90					95	
His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val
			100					105					110		
Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe
		115					120					125			
Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu
	130					135					140				
Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe
145					150					155					160
Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro
				165					170					175	
Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe
			180					185					190		
Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr
		195					200					205			
Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr
	210					215					220				
Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu
225					230					235					240
Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu
				245					250					255	
Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp
			260					265					270		
Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu
		275					280					285			
Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys
	290					295					300				
His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys
305					310					315					320
Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys
				325					330					335	
Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu
			340					345					350		
Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val
		355					360					365			
Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe

370	375	380
Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser		
385	390	395 400
Val Val Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu		
	405	410 415
Lys Cys Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe		
	420	425 430
Asp Glu Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln		
	435	440 445
Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala		
	450	455 460
Leu Leu Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr		
	465	470 475 480
Leu Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys		
	485	490 495
Lys His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser		
	500	505 510
Val Val Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser		
	515	520 525
Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro		
	530	535 540
Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe		
	545	550 555 560
Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu		
	565	570 575
Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys		
	580	585 590
His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp		
	595	600 605
Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr		
	610	615 620
Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala		
	625	630 635 640
Leu Gly Leu		

<210> 621
 <211> 713
 <212> PRT
 <213> Homo sapiens

<400> 621

Met	Lys	Leu	Lys	Thr	Val	Arg	Ser	Ala	Val	Leu	Ser	Ser	Leu	Phe	Ala	
1				5					10					15		
Ser	Gln	Val	Leu	Gly	Gln	Pro	Ile	Asp	Asp	Thr	Glu	Ser	Gln	Thr	Thr	
			20					25					30			
Ser	Val	Asn	Leu	Met	Ala	Asp	Asp	Thr	Glu	Ser	Ala	Phe	Ala	Thr	Gln	
		35					40					45				
Thr	Asn	Ser	Gly	Gly	Leu	Asp	Val	Val	Gly	Leu	Ile	Ser	Met	Ala	Lys	
	50					55					60					
Arg	Phe	Val	Asn	Gln	His	Leu	Cys	Gly	Ser	His	Leu	Val	Glu	Ala	Leu	
65					70					75					80	
Tyr	Leu	Val	Cys	Gly	Glu	Arg	Gly	Phe	Phe	Tyr	Thr	Pro	Lys	Thr	Gly	
				85					90					95		
Tyr	Gly	Ser	Ser	Ser	Arg	Arg	Ala	Pro	Gln	Thr	Gly	Ile	Val	Glu	Gln	
			100					105					110			
Cys	Cys	Thr	Ser	Ile	Cys	Ser	Leu	Tyr	Gln	Leu	Glu	Asn	Tyr	Cys	Asn	
		115					120					125				
Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	
	130					135					140					
Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	
145					150					155					160	
Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	
				165					170					175		
Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	
			180					185					190			
Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	
		195					200					205				
Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	
	210					215					220					
Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	
225					230					235					240	
Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	
				245					250					255		
Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	
			260					265					270			
Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	
		275					280					285				
Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	

290		295		300													
Cys 305	Leu	Leu	Pro	Lys	Leu 310	Asp	Glu	Leu	Arg	Asp 315	Glu	Gly	Lys	Ala	Ser 320		
Ser	Ala	Lys	Gln	Arg 325	Leu	Lys	Cys	Ala	Ser 330	Leu	Gln	Lys	Phe	Gly 335	Glu		
Arg	Ala	Phe	Lys 340	Ala	Trp	Ala	Val	Ala 345	Arg	Leu	Ser	Gln	Arg 350	Phe	Pro		
Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser 360	Lys	Leu	Val	Thr	Asp 365	Leu	Thr	Lys		
Val 370	His	Thr	Glu	Cys	Cys	His 375	Gly	Asp	Leu	Leu	Glu 380	Cys	Ala	Asp	Asp		
Arg 385	Ala	Asp	Leu	Ala	Lys 390	Tyr	Ile	Cys	Glu	Asn 395	Gln	Asp	Ser	Ile	Ser 400		
Ser	Lys	Leu	Lys	Glu 405	Cys	Cys	Glu	Lys 410	Pro	Leu	Leu	Glu	Lys	Ser 415	His		
Cys	Ile	Ala	Glu 420	Val	Glu	Asn	Asp	Glu 425	Met	Pro	Ala	Asp	Leu 430	Pro	Ser		
Leu	Ala	Ala	Asp 435	Phe	Val	Glu	Ser 440	Lys	Asp	Val	Cys	Lys 445	Asn	Tyr	Ala		
Glu 450	Ala	Lys	Asp	Val	Phe	Leu 455	Gly	Met	Phe	Leu	Tyr 460	Glu	Tyr	Ala	Arg		
Arg 465	His	Pro	Asp	Tyr	Ser 470	Val	Val	Leu	Leu	Leu 475	Arg	Leu	Ala	Lys	Thr 480		
Tyr	Glu	Thr	Thr	Leu 485	Glu	Lys	Cys	Cys 490	Ala	Ala	Ala	Asp	Pro	His 495	Glu		
Cys	Tyr	Ala	Lys 500	Val	Phe	Asp	Glu	Phe 505	Lys	Pro	Leu	Val	Glu 510	Glu	Pro		
Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys 520	Glu	Leu	Phe	Glu	Gln 525	Leu	Gly	Glu		
Tyr 530	Lys	Phe	Gln	Asn	Ala	Leu 535	Leu	Val	Arg	Tyr	Thr 540	Lys	Lys	Val	Pro		
Gln 545	Val	Ser	Thr	Pro	Thr 550	Leu	Val	Glu	Val	Ser 555	Arg	Asn	Leu	Gly	Lys 560		
Val	Gly	Ser	Lys	Cys 565	Cys	Lys	His	Pro	Glu 570	Ala	Lys	Arg	Met	Pro 575	Cys		
Ala	Glu	Asp	Tyr 580	Leu	Ser	Val	Val	Leu 585	Asn	Gln	Leu	Cys	Val 590	Leu	His		
Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser		

595					600					605					
Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr
610						615					620				
Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp
625					630					635					640
Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala
				645					650					655	
Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu
			660					665					670		
Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys
		675					680					685			
Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val
690						695					700				
Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	Leu							
705					710										

<210> 622
 <211> 718
 <212> PRT
 <213> Homo sapiens

<400> 622

Met	Lys	Leu	Lys	Thr	Val	Arg	Ser	Ala	Val	Leu	Ser	Ser	Leu	Phe	Ala
1				5					10					15	
Ser	Gln	Val	Leu	Gly	Gln	Pro	Ile	Asp	Asp	Thr	Glu	Ser	Gln	Thr	Thr
		20						25					30		
Ser	Val	Asn	Leu	Met	Ala	Asp	Asp	Thr	Glu	Ser	Ala	Phe	Ala	Thr	Gln
		35				40						45			
Thr	Asn	Ser	Gly	Gly	Leu	Asp	Val	Val	Gly	Leu	Ile	Ser	Met	Ala	Glu
	50					55					60				
Glu	Gly	Glu	Pro	Lys	Arg	Phe	Val	Asn	Gln	His	Leu	Cys	Gly	Ser	His
65					70					75					80
Leu	Val	Glu	Ala	Leu	Tyr	Leu	Val	Cys	Gly	Glu	Arg	Gly	Phe	Phe	Tyr
				85					90					95	
Thr	Pro	Lys	Thr	Gly	Tyr	Gly	Ser	Ser	Ser	Arg	Arg	Ala	Pro	Gln	Thr
			100					105					110		
Gly	Ile	Val	Glu	Gln	Cys	Cys	Thr	Ser	Ile	Cys	Ser	Leu	Tyr	Gln	Leu
		115					120					125			
Glu	Asn	Tyr	Cys	Asn	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe
	130					135					140				

Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe
 145 150 155 160
 Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val
 165 170 175
 Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala
 180 185 190
 Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys
 195 200 205
 Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys
 210 215 220
 Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp
 225 230 235 240
 Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val Met
 245 250 255
 Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu
 260 265 270
 Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu
 275 280 285
 Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala
 290 295 300
 Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp
 305 310 315 320
 Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu
 325 330 335
 Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu
 340 345 350
 Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val
 355 360 365
 Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu Leu
 370 375 380
 Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn
 385 390 395 400
 Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu
 405 410 415
 Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro
 420 425 430
 Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val
 435 440 445

Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu
450						455					460				
Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu
465					470					475					480
Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala
				485					490					495	
Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro
			500					505					510		
Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe
		515					520					525			
Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr
	530					535					540				
Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser
545					550					555					560
Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala
				565					570					575	
Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln
			580					585						590	
Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys
		595					600					605			
Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu
		610				615					620				
Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe
625					630					635					640
Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile
				645					650					655	
Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala
			660					665					670		
Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val
		675					680					685			
Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu
		690				695					700				
Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	Leu		
705					710					715					

<210> 623
 <211> 655
 <212> PRT

<213> Homo sapiens

<400> 623

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5				10						15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	His	Gly	Glu	Gly	Thr	Phe	Thr	Ser
			20				25						30		
Asp	Val	Ser	Ser	Tyr	Leu	Glu	Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala
		35					40					45			
Trp	Leu	Val	Lys	Gly	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg
	50					55					60				
Phe	Lys	Asp	Leu	Gly	Glu	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg
65					70					75					80
Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala
				85					90					95	
Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu
			100					105					110		
Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser
		115					120					125			
Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu
	130					135					140				
Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys
145					150					155					160
Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys
				165					170					175	
Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val
			180					185					190		
Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr
		195					200					205			
Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu
	210					215					220				
Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln
225					230					235					240
Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg
				245					250					255	
Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser
			260					265					270		
Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg
		275					280					285			

Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	290	295	300
Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	305	310	315
Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	325	330	335
Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	340	345	350
Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	355	360	365
Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	370	375	380
Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	385	390	395
Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	405	410	415
Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	420	425	430
Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	435	440	445
Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	450	455	460
Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	465	470	475
Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	485	490	495
Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	500	505	510
Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	515	520	525
Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	530	535	540
Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	545	550	555
Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	565	570	575
Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	580	585	590

Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys
595 600 605

Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe
610 615 620

Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu
625 630 635 640

Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
645 650 655

<210> 624
<211> 970
<212> PRT
<213> Homo sapiens

<400> 624

Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
1 5 10 15

Tyr Ser Arg Ser Leu Asp Lys Arg Asn Glu Ile Leu Gly Leu Lys Leu
20 25 30

Pro Gly Glu Pro Pro Leu Thr Ala Asn Thr Val Cys Leu Thr Leu Ser
35 40 45

Gly Leu Ser Lys Arg Gln Leu Asp Leu Cys Leu Arg Asn Pro Asp Val
50 55 60

Thr Ala Ser Ala Leu Gln Gly Leu His Ile Ala Val His Glu Cys Gln
65 70 75 80

His Gln Leu Arg Asp Gln Arg Trp Asn Cys Ser Ala Leu Glu Gly Gly
85 90 95

Gly Arg Leu Pro His His Ser Ala Ile Leu Lys Arg Gly Phe Arg Glu
100 105 110

Ser Ala Phe Ser Phe Ser Met Leu Ala Ala Gly Val Met His Ala Val
115 120 125

Ala Thr Ala Cys Ser Leu Gly Lys Leu Val Ser Cys Gly Cys Gly Trp
130 135 140

Lys Gly Ser Gly Glu Gln Asp Arg Leu Arg Ala Lys Leu Leu Gln Leu
145 150 155 160

Gln Ala Leu Ser Arg Gly Lys Ser Phe Pro His Ser Leu Pro Ser Pro
165 170 175

Gly Pro Gly Ser Ser Pro Ser Pro Gly Pro Gln Asp Thr Trp Glu Trp
180 185 190

Gly Gly Cys Asn His Asp Met Asp Phe Gly Glu Lys Phe Ser Arg Asp

195					200					205					
Phe	Leu	Asp	Ser	Arg	Glu	Ala	Pro	Arg	Asp	Ile	Gln	Ala	Arg	Met	Arg
210					215					220					
Ile	His	Asn	Asn	Arg	Val	Gly	Arg	Gln	Val	Val	Thr	Glu	Asn	Leu	Lys
225					230					235					240
Arg	Lys	Cys	Lys	Cys	His	Gly	Thr	Ser	Gly	Ser	Cys	Gln	Phe	Lys	Thr
				245					250					255	
Cys	Trp	Arg	Ala	Ala	Pro	Glu	Phe	Arg	Ala	Val	Gly	Ala	Ala	Leu	Arg
			260					265					270		
Glu	Arg	Leu	Gly	Arg	Ala	Ile	Phe	Ile	Asp	Thr	His	Asn	Arg	Asn	Ser
		275					280					285			
Gly	Ala	Phe	Gln	Pro	Arg	Leu	Arg	Pro	Arg	Arg	Leu	Ser	Gly	Glu	Leu
	290					295					300				
Val	Tyr	Phe	Glu	Lys	Ser	Pro	Asp	Phe	Cys	Glu	Arg	Asp	Pro	Thr	Met
305					310					315					320
Gly	Ser	Pro	Gly	Thr	Arg	Gly	Arg	Ala	Cys	Asn	Lys	Thr	Ser	Arg	Leu
				325					330					335	
Leu	Asp	Gly	Cys	Gly	Ser	Leu	Cys	Cys	Gly	Arg	Gly	His	Asn	Val	Leu
			340					345					350		
Arg	Gln	Thr	Arg	Val	Glu	Arg	Cys	His	Cys	Arg	Phe	His	Trp	Cys	Cys
		355					360					365			
Tyr	Val	Leu	Cys	Asp	Glu	Cys	Lys	Val	Thr	Glu	Trp	Val	Asn	Val	Cys
	370					375					380				
Lys	Asp	Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly
385					390					395					400
Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu
				405					410					415	
Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr
			420					425					430		
Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp
		435					440					445			
Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr
	450					455					460				
Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu
465					470					475					480
Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn
				485					490					495	
Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe

500					505					510					
His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala
		515					520					525			
Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys
	530					535					540				
Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala
545					550					555					560
Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala
				565					570					575	
Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly
			580					585					590		
Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe
		595					600					605			
Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr
	610					615					620				
Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp
625					630					635					640
Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile
				645					650					655	
Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser
			660					665					670		
His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro
		675					680					685			
Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr
	690					695					700				
Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala
705					710					715					720
Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys
				725					730					735	
Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His
			740					745					750		
Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu
		755					760					765			
Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly
	770					775					780				
Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val
785				790						795					800
Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly

805					810					815					
Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro
			820					825					830		
Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu
		835					840					845			
His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu
	850					855					860				
Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu
865						870					875				880
Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala
				885					890					895	
Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr
			900					905						910	
Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln
		915					920					925			
Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys
	930					935					940				
Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys	Leu
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Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	Leu						
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 <213> Homo sapiens

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Tyr	Ser	Arg	Gly	Val	Phe	Arg	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
	65				70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	

Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala		
			100					105					110				
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln		
		115					120					125					
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val		
	130					135					140						
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys		
145					150					155					160		
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro		
				165					170					175			
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys		
			180					185					190				
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu		
		195					200					205					
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys		
	210					215					220						
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val		
225					230					235					240		
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser		
				245				250						255			
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly		
			260					265					270				
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile		
		275					280					285					
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu		
	290					295					300						
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp		
305					310					315				320			
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser		
				325					330					335			
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly		
			340					345					350				
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val		
		355					360					365					
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys		
		370				375						380					
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu		
385					390					395					400		


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Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
405                                410                                415

Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
420                                425                                430

Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
435                                440                                445

Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
450                                455                                460

Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
465                                470                                475                                480

Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
485                                490                                495

Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
500                                505                                510

Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
515                                520                                525

Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
530                                535                                540

Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
545                                550                                555                                560

Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
565                                570                                575

Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
580                                585                                590

Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
595                                600                                605

Leu Glu Ala Glu Asp Leu Gln Val Gly Gln Val Glu Leu Gly Gly Gly
610                                615                                620

Pro Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu Gly Ser Leu Gln
625                                630                                635                                640

Glu Ala Glu Asp Leu Gln Val Gly Gln Val Glu Leu Gly Gly Gly Pro
645                                650                                655

Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu Gly Ser Leu Gln
660                                665                                670

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<212> PRT
<213> Homo sapiens

<400> 626

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Met	Lys	Val	Ser	Val	Ala	Ala	Leu	Ser	Cys	Leu	Met	Leu	Val	Thr	Ala	1	5	10	15
Leu	Gly	Ser	Gln	Ala	Phe	Val	Asn	Gln	His	Leu	Cys	Gly	Ser	His	Leu	20	25	30	
Val	Glu	Ala	Leu	Tyr	Leu	Val	Cys	Gly	Glu	Arg	Gly	Phe	Phe	Tyr	Thr	35	40	45	
Pro	Lys	Thr	Glu	Ala	Glu	Asp	Leu	Gln	Val	Gly	Ile	Val	Glu	Gln	Cys	50	55	60	
Cys	Thr	Ser	Ile	Cys	Ser	Leu	Tyr	Gln	Leu	Glu	Asn	Tyr	Cys	Asn	Asp	65	70	75	80
Ala	His	Lys	Ser	Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	85	90	95	
Asn	Phe	Lys	Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	100	105	110	
Cys	Pro	Phe	Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	115	120	125	
Ala	Lys	Thr	Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	130	135	140	
Leu	His	Thr	Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	145	150	155	160
Glu	Thr	Tyr	Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	165	170	175	
Arg	Asn	Glu	Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	180	185	190	
Arg	Leu	Val	Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	195	200	205	
Asn	Glu	Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	210	215	220	
His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	225	230	235	240
Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	245	250	255	
Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	260	265	270	
Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	275	280	285	
Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	290	295	300	

Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	305	310	315	320
His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg		325	330	335
Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser		340	345	350
Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys		355	360	365
Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu		370	375	380
Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu		385	390	395
Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg		405	410	415
His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr		420	425	430
Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys		435	440	445
Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln		450	455	460
Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr		465	470	475
Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln		485	490	495
Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val		500	505	510
Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala		515	520	525
Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu		530	535	540
Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu		545	550	555
Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr		565	570	575
Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile		580	585	590
Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu		595	600	605

Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys
610 615 620

Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala
625 630 635 640

Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala
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Ala Ser Gln Ala Ala Leu Gly Leu
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<213> Homo sapiens

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Ile Ser Ala Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu
20 25 30

Ala Leu Tyr Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys
35 40 45

Thr Glu Ala Glu Asp Leu Gln Val Gly Ile Val Glu Gln Cys Cys Thr
50 55 60

Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn Asp Ala His
65 70 75 80

Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe
85 90 95

Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro
100 105 110

Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys
115 120 125

Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His
130 135 140

Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr
145 150 155 160

Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn
165 170 175

Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu
180 185 190

Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His Asp Asn Glu

195					200					205					
Glu	Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro
210						215					220				
Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala
225					230					235					240
Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu
				245					250					255	
Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys
			260					265					270		
Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe
		275					280					285			
Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu
	290					295					300				
Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr
305					310					315					320
Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp
				325					330					335	
Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu
			340					345					350		
Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala
		355					360					365			
Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala
	370					375					380				
Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys
385					390					395					400
Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro
				405					410					415	
Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr
			420					425					430		
Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala
	435						440					445			
Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu
	450					455					460				
Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe
465					470					475					480
Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser
				485					490					495	
Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser

500					505					510					
Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp
		515					520					525			
Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr
	530					535					540				
Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn
545					550					555					560
Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro
				565						570					575
Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr
			580					585					590		
Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu
		595					600					605			
Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val
	610					615					620				
Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp
625					630					635					640
Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser
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Gln	Ala	Ala	Leu	Gly	Leu										
			660												

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<212> PRT

<213> Homo sapiens

<400> 628

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
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Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Val	Pro	Ile	Tyr	Glu	Lys	Lys	Tyr
			20					25					30		
Gly	Gln	Val	Pro	Met	Cys	Asp	Ala	Gly	Glu	Gln	Cys	Ala	Val	Arg	Lys
		35					40					45			
Gly	Ala	Arg	Ile	Gly	Lys	Leu	Cys	Asp	Cys	Pro	Arg	Gly	Thr	Ser	Cys
	50					55					60				
Asn	Ser	Phe	Leu	Leu	Lys	Cys	Leu	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
65					70					75					80
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
				85					90					95	
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val

100					105					110					
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
		115					120					125			
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
	130					135					140				
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
145					150					155					160
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
				165					170					175	
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
			180					185					190		
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
		195					200					205			
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
	210					215					220				
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
225					230					235					240
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
				245					250					255	
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
			260					265					270		
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
		275					280					285			
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
	290					295					300				
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly
305					310					315					320
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile
				325					330					335	
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu
			340					345					350		
Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp
		355					360					365			
Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser
	370					375					380				
Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly
385					390					395					400
Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val

405					410					415					
Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys
			420					425					430		
Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu
			435				440					445			
Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys
	450					455					460				
Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu
465						470					475				480
Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val
				485					490						495
Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His
			500					505					510		
Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val
			515				520					525			
Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg
	530					535					540				
Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe
545						550					555				560
Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala
				565					570					575	
Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu
			580					585					590		
Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys
		595					600					605			
Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala
	610					615					620				
Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe
625						630					635				640
Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly
				645					650					655	

Leu

<210> 629
 <211> 740
 <212> PRT
 <213> Homo sapiens

<400> 629

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Val	Pro	Ala	Pro	Lys	Val	Pro	Ile
			20					25					30		
Lys	Met	Gln	Val	Lys	His	Trp	Pro	Ser	Glu	Gln	Asp	Pro	Glu	Lys	Ala
		35					40					45			
Trp	Gly	Ala	Arg	Val	Val	Glu	Pro	Pro	Glu	Lys	Asp	Asp	Gln	Leu	Val
	50					55						60			
Val	Leu	Phe	Pro	Val	Gln	Lys	Pro	Lys	Leu	Leu	Thr	Thr	Glu	Glu	Lys
65					70					75					80
Pro	Arg	Gly	Gln	Gly	Arg	Gly	Pro	Ile	Leu	Pro	Gly	Thr	Lys	Ala	Trp
				85					90					95	
Met	Glu	Thr	Glu	Asp	Thr	Leu	Gly	Arg	Val	Leu	Ser	Pro	Glu	Pro	Asp
			100					105					110		
His	Asp	Ser	Leu	Tyr	His	Pro	Pro	Pro	Glu	Glu	Asp	Gln	Gly	Glu	Glu
		115					120					125			
Arg	Pro	Arg	Leu	Trp	Val	Met	Pro	Asn	His	Gln	Val	Leu	Leu	Gly	Pro
	130					135					140				
Glu	Glu	Asp	Gln	Asp	His	Ile	Tyr	His	Pro	Gln	Asp	Ala	His	Lys	Ser
145					150					155					160
Glu	Val	Ala	His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala
				165					170					175	
Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu
			180					185					190		
Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys
		195					200					205			
Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu
	210					215					220				
Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly
225					230					235					240
Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys
				245					250					255	
Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg
			260					265					270		
Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr
		275					280						285		
Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe
	290					295					300				

Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe
305 310 315 320
Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys
325 330 335
Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg
340 345 350
Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala
355 360 365
Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala
370 375 380
Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys
385 390 395 400
Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala
405 410 415
Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu
420 425 430
Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val
435 440 445
Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe
450 455 460
Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val
465 470 475 480
Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr
485 490 495
Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu
500 505 510
Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val
515 520 525
Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys
530 535 540
Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn
545 550 555 560
Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro
565 570 575
Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys
580 585 590
Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu
595 600 605

Ser Val Val Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val
 610 615 620
 Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg
 625 630 635 640
 Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu
 645 650 655
 Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser
 660 665 670
 Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val
 675 680 685
 Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp
 690 695 700
 Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu
 705 710 715 720
 Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala
 725 730 735
 Ala Leu Gly Leu
 740

<210> 630
 <211> 677
 <212> PRT
 <213> Homo sapiens

<400> 630
 Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
 1 5 10 15
 Tyr Ser Arg Ser Leu Asp Lys Arg Ile Lys Pro Glu Ala Pro Gly Glu
 20 25 30
 Asp Ala Ser Pro Glu Glu Leu Asn Arg Tyr Tyr Ala Ser Leu Arg His
 35 40 45
 Tyr Leu Asn Leu Val Thr Arg Gln Arg Tyr Ile Lys Pro Glu Ala Pro
 50 55 60
 Gly Glu Asp Ala Ser Pro Glu Glu Leu Asn Arg Tyr Tyr Ala Ser Leu
 65 70 75 80
 Arg His Tyr Leu Asn Leu Val Thr Arg Gln Arg Tyr Asp Ala His Lys
 85 90 95
 Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys
 100 105 110

Ala	Leu	Val	Leu	Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	115	120	125
Glu	Asp	His	Val	Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	130	135	140
Cys	Val	Ala	Asp	Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	145	150	155
Leu	Phe	Gly	Asp	Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	165	170	175
Gly	Glu	Met	Ala	Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	180	185	190
Cys	Phe	Leu	Gln	His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	195	200	205
Arg	Pro	Glu	Val	Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	210	215	220
Thr	Phe	Leu	Lys	Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	225	230	235
Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	245	250	255
Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	260	265	270
Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	275	280	285
Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	290	295	300
Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	305	310	315
Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	325	330	335
Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	340	345	350
Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	355	360	365
Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	Cys	Ile	Ala	Glu	370	375	380
Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	385	390	395
Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	405	410	415

Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp
420 425 430
Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr
435 440 445
Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys
450 455 460
Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile
465 470 475 480
Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln
485 490 495
Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr
500 505 510
Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys
515 520 525
Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr
530 535 540
Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro
545 550 555 560
Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg
565 570 575
Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys
580 585 590
Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu
595 600 605
Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu
610 615 620
Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met
625 630 635 640
Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys
645 650 655
Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln
660 665 670
Ala Ala Leu Gly Leu
675

<210> 631

<211> 677

<212> PRT

<213> Homo sapiens

<400> 631

Met	Lys	Trp	Val	Ser	Phe	Ile	Ser	Leu	Leu	Phe	Leu	Phe	Ser	Ser	Ala
1				5					10					15	
Tyr	Ser	Arg	Ser	Leu	Asp	Lys	Arg	Asp	Ala	His	Lys	Ser	Glu	Val	Ala
			20					25					30		
His	Arg	Phe	Lys	Asp	Leu	Gly	Glu	Glu	Asn	Phe	Lys	Ala	Leu	Val	Leu
		35					40					45			
Ile	Ala	Phe	Ala	Gln	Tyr	Leu	Gln	Gln	Cys	Pro	Phe	Glu	Asp	His	Val
	50					55					60				
Lys	Leu	Val	Asn	Glu	Val	Thr	Glu	Phe	Ala	Lys	Thr	Cys	Val	Ala	Asp
65					70					75					80
Glu	Ser	Ala	Glu	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly	Asp
				85					90					95	
Lys	Leu	Cys	Thr	Val	Ala	Thr	Leu	Arg	Glu	Thr	Tyr	Gly	Glu	Met	Ala
			100					105					110		
Asp	Cys	Cys	Ala	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu	Gln
		115					120					125			
His	Lys	Asp	Asp	Asn	Pro	Asn	Leu	Pro	Arg	Leu	Val	Arg	Pro	Glu	Val
	130					135					140				
Asp	Val	Met	Cys	Thr	Ala	Phe	His	Asp	Asn	Glu	Glu	Thr	Phe	Leu	Lys
145					150					155					160
Lys	Tyr	Leu	Tyr	Glu	Ile	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro
				165					170					175	
Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys
			180					185					190		
Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu
		195					200					205			
Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys
	210					215					220				
Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val
225					230					235					240
Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser
				245					250					255	
Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	Val	His	Thr	Glu	Cys	Cys	His	Gly
			260					265					270		
Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile
		275					280					285			
Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu
	290					295					300				

Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp
 305 310 315 320
 Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser
 325 330 335
 Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly
 340 345 350
 Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val
 355 360 365
 Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 370 375 380
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 385 390 395 400
 Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
 405 410 415
 Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
 420 425 430
 Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
 435 440 445
 Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
 450 455 460
 Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
 465 470 475 480
 Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
 485 490 495
 Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
 500 505 510
 Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
 515 520 525
 Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
 530 535 540
 Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
 545 550 555 560
 Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
 565 570 575
 Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
 580 585 590
 Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly
 595 600 605

Leu Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Ser Pro Glu Glu Leu
 610 615 620
 Asn Arg Tyr Tyr Ala Ser Leu Arg His Tyr Leu Asn Leu Val Thr Arg
 625 630 635 640
 Gln Arg Tyr Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Ser Pro Glu
 645 650 655
 Glu Leu Asn Arg Tyr Tyr Ala Ser Leu Arg His Tyr Leu Asn Leu Val
 660 665 670
 Thr Arg Gln Arg Tyr
 675
 <210> 632
 <211> 187
 <212> PRT
 <213> Homo sapiens
 <400> 632
 Met Thr Asn Lys Cys Leu Leu Gln Ile Ala Leu Leu Leu Cys Phe Ser
 1 5 10 15
 Thr Thr Ala Leu Ser Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg
 20 25 30
 Ser Ser Asn Phe Gln Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg
 35 40 45
 Leu Glu Tyr Cys Leu Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu
 50 55 60
 Ile Lys Gln Leu Gln Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile
 65 70 75 80
 Tyr Glu Met Leu Gln Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser
 85 90 95
 Ser Thr Gly Trp Asn Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val
 100 105 110
 Tyr His Gln Ile Asn His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu
 115 120 125
 Lys Glu Asp Phe Thr Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys
 130 135 140
 Arg Tyr Tyr Gly Arg Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser
 145 150 155 160
 His Cys Ala Trp Thr Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr
 165 170 175
 Phe Ile Asn Arg Leu Thr Gly Tyr Leu Arg Asn
 180 185

<210> 633
 <211> 429
 <212> PRT
 <213> Homo sapiens

<400> 633

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Met Cys Pro Gly Ala Leu Trp Val Ala Leu Pro Leu Leu Ser Leu Leu
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Ala Gly Ser Leu Gln Gly Lys Pro Leu Gln Ser Trp Gly Arg Gly Ser
      20          25          30

Ala Gly Gly Asn Ala His Ser Pro Leu Gly Val Pro Gly Gly Gly Leu
      35          40          45

Pro Glu His Thr Phe Asn Leu Lys Met Phe Leu Glu Asn Val Lys Val
      50          55          60

Asp Phe Leu Arg Ser Leu Asn Leu Ser Gly Val Pro Ser Gln Asp Lys
      65          70          75          80

Thr Arg Val Glu Pro Pro Gln Tyr Met Ile Asp Leu Tyr Asn Arg Tyr
      85          90          95

Thr Ser Asp Lys Ser Thr Thr Pro Ala Ser Asn Ile Val Arg Ser Phe
      100         105         110

Ser Met Glu Asp Ala Ile Ser Ile Thr Ala Thr Glu Asp Phe Pro Phe
      115         120         125

Gln Lys His Ile Leu Leu Phe Asn Ile Ser Ile Pro Arg His Glu Gln
      130         135         140

Ile Thr Arg Ala Glu Leu Arg Leu Tyr Val Ser Cys Gln Asn His Val
      145         150         155         160

Asp Pro Ser His Asp Leu Lys Gly Ser Val Val Ile Tyr Asp Val Leu
      165         170         175

Asp Gly Thr Asp Ala Trp Asp Ser Ala Thr Glu Thr Lys Thr Phe Leu
      180         185         190

Val Ser Gln Asp Ile Gln Asp Glu Gly Trp Glu Thr Leu Glu Val Ser
      195         200         205

Ser Ala Val Lys Arg Trp Val Arg Ser Asp Ser Thr Lys Ser Lys Asn
      210         215         220

Lys Leu Glu Val Thr Val Glu Ser His Arg Lys Gly Cys Asp Thr Leu
      225         230         235         240

Asp Ile Ser Val Pro Pro Gly Ser Arg Asn Leu Pro Phe Phe Val Val
      245         250         255

Phe Ser Asn Asp His Ser Ser Gly Thr Lys Glu Thr Arg Leu Glu Leu

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260										265					270															
Arg	Glu	Met	Ile	Ser	His	Glu	Gln	Glu	Ser	Val	Leu	Lys	Lys	Leu	Ser															
		275						280					285																	
Lys	Asp	Gly	Ser	Thr	Glu	Ala	Gly	Glu	Ser	Ser	His	Glu	Glu	Asp	Thr															
	290					295					300																			
Asp	Gly	His	Val	Ala	Ala	Gly	Ser	Thr	Leu	Ala	Arg	Arg	Lys	Arg	Ser															
305					310					315					320															
Ala	Gly	Ala	Gly	Ser	His	Cys	Gln	Lys	Thr	Ser	Leu	Arg	Val	Asn	Phe															
				325					330					335																
Glu	Asp	Ile	Gly	Trp	Asp	Ser	Trp	Ile	Ile	Ala	Pro	Lys	Glu	Tyr	Glu															
			340					345					350																	
Ala	Tyr	Glu	Cys	Lys	Gly	Gly	Cys	Phe	Phe	Pro	Leu	Ala	Asp	Asp	Val															
	355					360						365																		
Thr	Pro	Thr	Lys	His	Ala	Ile	Val	Gln	Thr	Leu	Val	His	Leu	Lys	Phe															
	370					375					380																			
Pro	Thr	Lys	Val	Gly	Lys	Ala	Cys	Cys	Val	Pro	Thr	Lys	Leu	Ser	Pro															
385					390					395					400															
Ile	Ser	Val	Leu	Tyr	Lys	Asp	Asp	Met	Gly	Val	Pro	Thr	Leu	Lys	Tyr															
			405					410					415																	
His	Tyr	Glu	Gly	Met	Ser	Val	Ala	Glu	Cys	Gly	Cys	Arg																		
		420						425																						

<210> 634
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 <212> PRT
 <213> Homo sapiens

<400> 634																													
Met	Cys	Pro	Gly	Ala	Leu	Trp	Val	Ala	Leu	Pro	Leu	Leu	Ser	Leu	Leu														
1				5					10					15															
Ala	Gly	Ser	Leu	Gln	Gly	Lys	Pro	Leu	Gln	Ser	Trp	Gly	Arg	Gly	Ser														
			20					25					30																
Ala	Gly	Gly	Asn	Ala	His	Ser	Pro	Leu	Gly	Val	Pro	Gly	Gly	Gly	Leu														
		35					40					45																	
Pro	Glu	His	Thr	Phe	Asn	Leu	Lys	Met	Phe	Leu	Glu	Asn	Val	Lys	Val														
	50					55					60																		
Asp	Phe	Leu	Arg	Ser	Leu	Asn	Leu	Ser	Gly	Val	Pro	Ser	Gln	Asp	Lys														
65					70					75					80														
Thr	Arg	Val	Glu	Pro	Pro	Gln	Tyr	Met	Ile	Asp	Leu	Tyr	Asn	Arg	Tyr														
				85					90					95															

Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val Pro Thr Leu Lys Tyr
405 410 415

His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly Cys Arg
420 425

<210> 635

<211> 429

<212> PRT

<213> Homo sapiens

<400> 635

Met Cys Pro Gly Ala Leu Trp Val Ala Leu Pro Leu Leu Ser Leu Leu
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Ala Gly Ser Leu Gln Gly Lys Pro Leu Gln Ser Trp Gly Arg Gly Ser
20 25 30

Ala Gly Gly Asn Ala His Ser Pro Leu Gly Val Pro Gly Gly Gly Leu
35 40 45

Pro Glu His Thr Phe Asn Leu Lys Met Phe Leu Glu Asn Val Lys Val
50 55 60

Asp Phe Leu Arg Ser Leu Asn Leu Ser Gly Val Pro Ser Gln Asp Lys
65 70 75 80

Thr Arg Val Glu Pro Pro Gln Tyr Met Ile Asp Leu Tyr Asn Arg Tyr
85 90 95

Thr Ser Asp Lys Ser Thr Thr Pro Ala Ser Asn Ile Val Arg Ser Phe
100 105 110

Ser Met Glu Asp Ala Ile Ser Ile Thr Ala Thr Glu Asp Phe Pro Phe
115 120 125

Gln Lys His Ile Leu Leu Phe Asn Ile Ser Ile Pro Arg His Glu Gln
130 135 140

Ile Thr Arg Ala Glu Leu Arg Leu Tyr Val Ser Cys Gln Asn His Val
145 150 155 160

Asp Pro Ser His Asp Leu Lys Gly Ser Val Val Ile Tyr Asp Val Leu
165 170 175

Asp Gly Thr Asp Ala Trp Asp Ser Ala Thr Glu Thr Lys Thr Phe Leu
180 185 190

Val Ser Gln Asp Ile Gln Asp Glu Gly Trp Glu Thr Leu Glu Val Ser
195 200 205

Ser Ala Val Lys Arg Trp Val Arg Ser Asp Ser Thr Lys Ser Lys Asn
210 215 220

Lys Leu Glu Val Thr Val Glu Ser His Arg Lys Gly Cys Asp Thr Leu
 225 230 235 240
 Asp Ile Ser Val Pro Pro Gly Ser Arg Asn Leu Pro Phe Phe Val Val
 245 250 255
 Phe Ser Asn Asp His Ser Ser Gly Thr Lys Glu Thr Arg Leu Glu Leu
 260 265 270
 Arg Glu Met Ile Ser His Glu Gln Glu Ser Val Leu Lys Lys Leu Ser
 275 280 285
 Lys Asp Gly Ser Thr Glu Ala Gly Glu Ser Ser His Glu Glu Asp Thr
 290 295 300
 Asp Gly His Val Ala Ala Gly Ser Thr Leu Ala Arg Arg Lys Arg Ser
 305 310 315 320
 Ala Gly Ala Gly Ser His Cys Gln Lys Thr Ser Leu Arg Val Asn Phe
 325 330 335
 Glu Asp Ile Gly Trp Asp Ser Trp Ile Ile Ala Pro Lys Glu Tyr Glu
 340 345 350
 Ala Tyr Glu Cys Lys Gly Gly Cys Phe Phe Pro Leu Ala Asp Asp Val
 355 360 365
 Thr Pro Thr Lys His Ala Ile Val Gln Thr Leu Val His Leu Lys Phe
 370 375 380
 Pro Thr Lys Val Gly Lys Ala Cys Cys Val Pro Thr Lys Leu Ser Pro
 385 390 395 400
 Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val Pro Thr Leu Lys Tyr
 405 410 415
 His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly Cys Arg
 420 425

<210> 636

<211> 429

<212> PRT

<213> Homo sapiens

<400> 636

Met Cys Pro Gly Ala Leu Trp Val Ala Leu Pro Leu Leu Ser Leu Leu
 1 5 10 15
 Ala Gly Ser Leu Gln Gly Lys Pro Leu Gln Ser Trp Gly Arg Gly Ser
 20 25 30
 Ala Gly Gly Asn Ala His Ser Pro Leu Gly Val Pro Gly Gly Gly Leu
 35 40 45
 Pro Glu His Thr Phe Asn Leu Lys Met Phe Leu Glu Asn Val Lys Val

50					55					60					
Asp 65	Phe	Leu	Arg	Ser	Leu 70	Asn	Leu	Ser	Gly	Val 75	Pro	Ser	Gln	Asp	Lys 80
Thr	Arg	Val	Glu	Pro 85	Pro	Gln	Tyr	Met	Ile 90	Asp	Leu	Tyr	Asn	Arg 95	Tyr
Thr	Ser	Asp	Lys 100	Ser	Thr	Thr	Pro	Ala 105	Ser	Asn	Ile	Val	Arg 110	Ser	Phe
Ser	Met	Glu	Asp 115	Ala	Ile	Ser	Ile 120	Thr	Ala	Thr	Glu	Asp 125	Phe	Pro	Phe
Gln 130	Lys	His	Ile	Leu	Leu	Phe 135	Asn	Ile	Ser	Ile 140	Pro	Arg	His	Glu	Gln
Ile 145	Thr	Arg	Ala	Glu	Leu 150	Arg	Leu	Tyr	Val	Ser 155	Cys	Gln	Asn	His	Val 160
Asp	Pro	Ser	His	Asp 165	Leu	Lys	Gly	Ser	Val 170	Val	Ile	Tyr	Asp 175	Val	Leu
Asp	Gly	Thr	Asp 180	Ala	Trp	Asp	Ser	Ala 185	Thr	Glu	Thr	Lys	Thr 190	Phe	Leu
Val	Ser	Gln	Asp 195	Ile	Gln	Asp	Glu 200	Gly	Trp	Glu	Thr	Leu 205	Glu	Val	Ser
Ser	Ala	Val	Lys 210	Arg	Trp	Val 215	Arg	Ser	Asp	Ser 220	Thr	Lys	Ser	Lys	Asn
Lys 225	Leu	Glu	Val	Thr	Val 230	Glu	Ser	His	Arg	Lys 235	Gly	Cys	Asp	Thr	Leu 240
Asp	Ile	Ser	Val	Pro 245	Pro	Gly	Ser	Arg	Asn 250	Leu	Pro	Phe	Phe 255	Val	Val
Phe	Ser	Asn	Asp 260	His	Ser	Ser	Gly	Thr 265	Lys	Glu	Thr	Arg	Leu 270	Glu	Leu
Arg	Glu	Met	Ile 275	Ser	His	Glu	Gln 280	Glu	Ser	Val	Leu	Lys 285	Lys	Leu	Ser
Lys 290	Asp	Gly	Ser	Thr	Glu	Ala 295	Gly	Glu	Ser	Ser	His 300	Glu	Glu	Asp	Thr
Asp 305	Gly	His	Val	Ala	Ala 310	Gly	Ser	Thr	Leu	Ala 315	Arg	Arg	Lys	Arg	Ser 320
Ala	Gly	Ala	Gly	Ser 325	His	Cys	Gln	Lys	Thr 330	Ser	Leu	Arg	Val	Asn 335	Phe
Glu	Asp	Ile	Gly 340	Trp	Asp	Ser	Trp	Ile 345	Ile	Ala	Pro	Lys	Glu 350	Tyr	Glu
Ala	Tyr	Glu	Cys	Lys	Gly	Gly	Cys	Phe	Phe	Pro	Leu	Ala	Asp	Asp	Val

355	360	365
Thr Pro Thr Lys His Ala Ile Val Gln Thr Leu Val His Leu Lys Phe		
370	375	380
Pro Thr Lys Val Gly Lys Ala Cys Cys Val Pro Thr Lys Leu Ser Pro		
385	390	395 400
Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val Pro Thr Leu Lys Tyr		
405	410	415
His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly Cys Arg		
420	425	

<210> 637
 <211> 429
 <212> PRT
 <213> Homo sapiens

<400> 637

Met Cys Pro Gly Ala Leu Trp Val Ala Leu Pro Leu Leu Ser Leu Leu		
1	5	10 15
Ala Gly Ser Leu Gln Gly Lys Pro Leu Gln Ser Trp Gly Arg Gly Ser		
20	25	30
Ala Gly Gly Asn Ala His Ser Pro Leu Gly Val Pro Gly Gly Gly Leu		
35	40	45
Pro Glu His Thr Phe Asn Leu Lys Met Phe Leu Glu Asn Val Lys Val		
50	55	60
Asp Phe Leu Arg Ser Leu Asn Leu Ser Gly Val Pro Ser Gln Asp Lys		
65	70	75 80
Thr Arg Val Glu Pro Pro Gln Tyr Met Ile Asp Leu Tyr Asn Arg Tyr		
85	90	95
Thr Ser Asp Lys Ser Thr Thr Pro Ala Ser Asn Ile Val Arg Ser Phe		
100	105	110
Ser Met Glu Asp Ala Ile Ser Ile Thr Ala Thr Glu Asp Phe Pro Phe		
115	120	125
Gln Lys His Ile Leu Leu Phe Asn Ile Ser Ile Pro Arg His Glu Gln		
130	135	140
Ile Thr Arg Ala Glu Leu Arg Leu Tyr Val Ser Cys Gln Asn His Val		
145	150	155 160
Asp Pro Ser His Asp Leu Lys Gly Ser Val Val Ile Tyr Asp Val Leu		
165	170	175
Asp Gly Thr Asp Ala Trp Asp Ser Ala Thr Glu Thr Lys Thr Phe Leu		
180	185	190

Val Ser Gln Asp Ile Gln Asp Glu Gly Trp Glu Thr Leu Glu Val Ser
195 200 205
Ser Ala Val Lys Arg Trp Val Arg Ser Asp Ser Thr Lys Ser Lys Asn
210 215 220
Lys Leu Glu Val Thr Val Glu Ser His Arg Lys Gly Cys Asp Thr Leu
225 230 235 240
Asp Ile Ser Val Pro Pro Gly Ser Arg Asn Leu Pro Phe Phe Val Val
245 250 255
Phe Ser Asn Asp His Ser Ser Gly Thr Lys Glu Thr Arg Leu Glu Leu
260 265 270
Arg Glu Met Ile Ser His Glu Gln Glu Ser Val Leu Lys Lys Leu Ser
275 280 285
Lys Asp Gly Ser Thr Glu Ala Gly Glu Ser Ser His Glu Glu Asp Thr
290 295 300
Asp Gly His Val Ala Ala Gly Ser Thr Leu Ala Arg Arg Lys Arg Ser
305 310 315 320
Ala Gly Ala Gly Ser His Cys Gln Lys Thr Ser Leu Arg Val Asn Phe
325 330 335
Glu Asp Ile Gly Trp Asp Ser Trp Ile Ile Ala Pro Lys Glu Tyr Glu
340 345 350
Ala Tyr Glu Cys Lys Gly Gly Cys Phe Phe Pro Leu Ala Asp Asp Val
355 360 365
Thr Pro Thr Lys His Ala Ile Val Gln Thr Leu Val His Leu Lys Phe
370 375 380
Pro Thr Lys Val Gly Lys Ala Cys Cys Val Pro Thr Lys Leu Ser Pro
385 390 395 400
Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val Pro Thr Leu Lys Tyr
405 410 415
His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly Cys Arg
420 425

<210> 638

<211> 429

<212> PRT

<213> Homo sapiens

<400> 638

Met Cys Pro Gly Ala Leu Trp Val Ala Leu Pro Leu Leu Ser Leu Leu
1 5 10 15

Ala Gly Ser Leu Gln Gly Lys Pro Leu Gln Ser Trp Gly Arg Gly Ser
 20 25 30
 Ala Gly Gly Asn Ala His Ser Pro Leu Gly Val Pro Gly Gly Gly Leu
 35 40 45
 Pro Glu His Thr Phe Asn Leu Lys Met Phe Leu Glu Asn Val Lys Val
 50 55 60
 Asp Phe Leu Arg Ser Leu Asn Leu Ser Gly Val Pro Ser Gln Asp Lys
 65 70 75 80
 Thr Arg Val Glu Pro Pro Gln Tyr Met Ile Asp Leu Tyr Asn Arg Tyr
 85 90 95
 Thr Ser Asp Lys Ser Thr Thr Pro Ala Ser Asn Ile Val Arg Ser Phe
 100 105 110
 Ser Met Glu Asp Ala Ile Ser Ile Thr Ala Thr Glu Asp Phe Pro Phe
 115 120 125
 Gln Lys His Ile Leu Leu Phe Asn Ile Ser Ile Pro Arg His Glu Gln
 130 135 140
 Ile Thr Arg Ala Glu Leu Arg Leu Tyr Val Ser Cys Gln Asn His Val
 145 150 155 160
 Asp Pro Ser His Asp Leu Lys Gly Ser Val Val Ile Tyr Asp Val Leu
 165 170 175
 Asp Gly Thr Asp Ala Trp Asp Ser Ala Thr Glu Thr Lys Thr Phe Leu
 180 185 190
 Val Ser Gln Asp Ile Gln Asp Glu Gly Trp Glu Thr Leu Glu Val Ser
 195 200 205
 Ser Ala Val Lys Arg Trp Val Arg Ser Asp Ser Thr Lys Ser Lys Asn
 210 215 220
 Lys Leu Glu Val Thr Val Glu Ser His Arg Lys Gly Cys Asp Thr Leu
 225 230 235 240
 Asp Ile Ser Val Pro Pro Gly Ser Arg Asn Leu Pro Phe Phe Val Val
 245 250 255
 Phe Ser Asn Asp His Ser Ser Gly Thr Lys Glu Thr Arg Leu Glu Leu
 260 265 270
 Arg Glu Met Ile Ser His Glu Gln Glu Ser Val Leu Lys Lys Leu Ser
 275 280 285
 Lys Asp Gly Ser Thr Glu Ala Gly Glu Ser Ser His Glu Glu Asp Thr
 290 295 300
 Asp Gly His Val Ala Ala Gly Ser Thr Leu Ala Arg Arg Lys Arg Ser
 305 310 315 320

Ala Gly Ala Gly Ser His Cys Gln Lys Thr Ser Leu Arg Val Asn Phe
325 330 335

Glu Asp Ile Gly Trp Asp Ser Trp Ile Ile Ala Pro Lys Glu Tyr Glu
340 345 350

Ala Tyr Glu Cys Lys Gly Gly Cys Phe Phe Pro Leu Ala Asp Asp Val
355 360 365

Thr Pro Thr Lys His Ala Ile Val Gln Thr Leu Val His Leu Lys Phe
370 375 380

Pro Thr Lys Val Gly Lys Ala Cys Cys Val Pro Thr Lys Leu Ser Pro
385 390 395 400

Ile Ser Val Leu Tyr Lys Asp Asp Met Gly Val Pro Thr Leu Lys Tyr
405 410 415

His Tyr Glu Gly Met Ser Val Ala Glu Cys Gly Cys Arg
420 425

<210> 639
<211> 62
<212> PRT
<213> Homo sapiens

<400> 639
Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
1 5 10 15

Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Lys Arg
20 25 30

Gly Gly Gly Pro Gly Arg Gly Lys Arg Gly Ile Val Glu Gln Cys Cys
35 40 45

Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
50 55 60

<210> 640
<211> 62
<212> PRT
<213> Homo sapiens

<400> 640
Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
1 5 10 15

Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Lys Arg
20 25 30

Gly Gly Gly Pro Gly Arg Gly Lys Arg Gly Ile Val Glu Gln Cys Cys
35 40 45

Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn

50

55

60

<210> 641

<211> 58

<212> PRT

<213> Homo sapiens

<400> 641

Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15

Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Gly
 20 25 30

Gly Pro Gly Lys Lys Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys
 35 40 45

Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 50 55

<210> 642

<211> 58

<212> PRT

<213> Homo sapiens

<400> 642

Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15

Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Gly
 20 25 30

Gly Pro Gly Lys Lys Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys
 35 40 45

Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 50 55

<210> 643

<211> 63

<212> PRT

<213> Homo sapiens

<400> 643

Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15

Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
 20 25 30

Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
 35 40 45

Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
50 55 60

<210> 644
<211> 63
<212> PRT
<213> Homo sapiens

<400> 644
Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
1 5 10 15
Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
20 25 30
Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
35 40 45
Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
50 55 60

<210> 645
<211> 63
<212> PRT
<213> Homo sapiens

<400> 645
Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
1 5 10 15
Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
20 25 30
Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
35 40 45
Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
50 55 60

<210> 646
<211> 58
<212> PRT
<213> Homo sapiens

<400> 646
Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
1 5 10 15
Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Gly
20 25 30

Gly Pro Gly Lys Arg Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys
35 40 45

Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
50 55

<210> 647
<211> 166
<212> PRT
<213> Homo sapiens

<400> 647
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
1 5 10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
20 25 30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
35 40 45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
50 55 60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
65 70 75 80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
85 90 95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
100 105 110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
115 120 125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
130 135 140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145 150 155 160
Thr Gly Tyr Leu Arg Asn
165

<210> 648
<211> 166
<212> PRT
<213> Homo sapiens

<400> 648
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
1 5 10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu

20					25					30					
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 649

<211> 166

<212> PRT

<213> Homo sapiens

<400> 649

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		

Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
115 120 125

Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
130 135 140

Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145 150 155 160

Thr Gly Tyr Leu Arg Asn
165

<210> 650
<211> 14
<212> PRT
<213> Homo sapiens

<400> 650
Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
1 5 10

<210> 651
<211> 180
<212> PRT
<213> Homo sapiens

<400> 651
Met Lys Ser Ile Tyr Phe Val Ala Gly Leu Phe Val Met Leu Val Gln
1 5 10 15

Gly Ser Trp Gln Arg Ser Leu Gln Asp Thr Glu Glu Lys Ser Arg Ser
20 25 30

Phe Ser Ala Ser Gln Ala Asp Pro Leu Ser Asp Pro Asp Gln Met Asn
35 40 45

Glu Asp Lys Arg His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys
50 55 60

Tyr Leu Asp Ser Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn
65 70 75 80

Thr Lys Arg Asn Arg Asn Asn Ile Ala Lys Arg His Asp Glu Phe Glu
85 90 95

Arg His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu
100 105 110

Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
115 120 125

Arg Arg Asp Phe Pro Glu Glu Val Ala Ile Val Glu Glu Leu Gly Arg
130 135 140

Arg His Ala Asp Gly Ser Phe Ser Asp Glu Met Asn Thr Ile Leu Asp
 145 150 155 160

Asn Leu Ala Ala Arg Asp Phe Ile Asn Trp Leu Ile Gln Thr Lys Ile
 165 170 175

Thr Asp Arg Lys
 180

<210> 652
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 652
 Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15

Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
 20 25 30

Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
 35 40 45

Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 50 55 60

<210> 653
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 653
 Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15

Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
 20 25 30

Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
 35 40 45

Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 50 55 60

<210> 654
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 654
 Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys

1 5 10

<210> 655
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 655
 Ser Ala Asn Ser Asn Pro Ala Met Ala Pro Arg Glu Arg Lys Ala Gly
 1 5 10 15
 Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
 20 25

<210> 656
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 656
 Ser Ala Asn Ser Asn Pro Ala Met Ala Pro Arg Glu Arg Lys Ala Gly
 1 5 10 15
 Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
 20 25

<210> 657
 <211> 86
 <212> PRT
 <213> Homo sapiens

<400> 657
 Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15
 Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Arg Arg
 20 25 30
 Glu Ala Glu Asp Leu Gln Val Gly Gln Val Glu Leu Gly Gly Gly Pro
 35 40 45
 Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu Gly Ser Leu Gln Lys
 50 55 60
 Arg Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys Ser Leu Tyr Gln
 65 70 75 80
 Leu Glu Asn Tyr Cys Asn
 85

<210> 658
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 658
 Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15
 Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
 20 25 30
 Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
 35 40 45
 Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 50 55 60

<210> 659
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 659
 Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15
 Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
 20 25 30
 Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
 35 40 45
 Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 50 55 60

<210> 660
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 660
 Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15
 Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
 20 25 30
 Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
 35 40 45
 Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 50 55 60

<210> 661
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 661
 Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15
 Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
 20 25 30
 Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
 35 40 45
 Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 50 55 60

<210> 662
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 662
 Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15
 Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
 20 25 30
 Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
 35 40 45
 Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 50 55 60

<210> 663
 <211> 62
 <212> PRT
 <213> Homo sapiens

<400> 663
 Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15
 Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Lys Arg
 20 25 30
 Gly Gly Gly Pro Gly Arg Gly Lys Arg Gly Ile Val Glu Gln Cys Cys
 35 40 45
 Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn

50

55

60

<210> 664

<211> 202

<212> PRT

<213> Homo sapiens

<400> 664

Met Leu Val Ala Gly Phe Leu Leu Ala Leu Pro Pro Ser Trp Ala Ala
 1 5 10 15

Gly Ala Pro Arg Ala Gly Arg Arg Pro Ala Arg Pro Arg Gly Cys Ala
 20 25 30

Asp Arg Pro Glu Glu Leu Leu Glu Gln Leu Tyr Gly Arg Leu Ala Ala
 35 40 45

Gly Val Leu Ser Ala Phe His His Thr Leu Gln Leu Gly Pro Arg Glu
 50 55 60

Gln Ala Arg Asn Ala Ser Cys Pro Ala Gly Gly Arg Pro Ala Asp Arg
 65 70 75 80

Arg Phe Arg Pro Pro Thr Asn Leu Arg Ser Val Ser Pro Trp Ala Tyr
 85 90 95

Arg Ile Ser Tyr Asp Pro Ala Arg Tyr Pro Arg Tyr Leu Pro Glu Ala
 100 105 110

Tyr Cys Leu Cys Arg Gly Cys Leu Thr Gly Leu Phe Gly Glu Glu Asp
 115 120 125

Val Arg Phe Arg Ser Ala Pro Val Tyr Met Pro Thr Val Val Leu Arg
 130 135 140

Arg Thr Pro Ala Cys Ala Gly Gly Arg Ser Val Tyr Thr Glu Ala Tyr
 145 150 155 160

Val Thr Ile Pro Val Gly Cys Thr Cys Val Pro Glu Pro Glu Lys Asp
 165 170 175

Ala Asp Ser Ile Asn Ser Ser Ile Asp Lys Gln Gly Ala Lys Leu Leu
 180 185 190

Leu Gly Pro Asn Asp Ala Pro Ala Gly Pro
 195 200

<210> 665

<211> 14

<212> PRT

<213> Homo sapiens

<400> 665

Gly Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
 1 5 10

<210> 666
 <211> 202
 <212> PRT
 <213> Homo sapiens

<400> 666
 Met Leu Val Ala Gly Phe Leu Leu Ala Leu Pro Pro Ser Trp Ala Ala
 1 5 10 15
 Gly Ala Pro Arg Ala Gly Arg Arg Pro Ala Arg Pro Arg Gly Cys Ala
 20 25 30
 Asp Arg Pro Glu Glu Leu Leu Glu Gln Leu Tyr Gly Arg Leu Ala Ala
 35 40 45
 Gly Val Leu Ser Ala Phe His His Thr Leu Gln Leu Gly Pro Arg Glu
 50 55 60
 Gln Ala Arg Asn Ala Ser Cys Pro Ala Gly Gly Arg Pro Ala Asp Arg
 65 70 75 80
 Arg Phe Arg Pro Pro Thr Asn Leu Arg Ser Val Ser Pro Trp Ala Tyr
 85 90 95
 Arg Ile Ser Tyr Asp Pro Ala Arg Tyr Pro Arg Tyr Leu Pro Glu Ala
 100 105 110
 Tyr Cys Leu Cys Arg Gly Cys Leu Thr Gly Leu Phe Gly Glu Glu Asp
 115 120 125
 Val Arg Phe Arg Ser Ala Pro Val Tyr Met Pro Thr Val Val Leu Arg
 130 135 140
 Arg Thr Pro Ala Cys Ala Gly Gly Arg Ser Val Tyr Thr Glu Ala Tyr
 145 150 155 160
 Val Thr Ile Pro Val Gly Cys Thr Cys Val Pro Glu Pro Glu Lys Asp
 165 170 175
 Ala Asp Ser Ile Asn Ser Ser Ile Asp Lys Gln Gly Ala Lys Leu Leu
 180 185 190
 Leu Gly Pro Asn Asp Ala Pro Ala Gly Pro
 195 200

<210> 667
 <211> 229
 <212> PRT
 <213> Homo sapiens

<400> 667

Met Asp Leu Leu Gln Phe Leu Ala Phe Leu Phe Val Leu Leu Leu Ser
1 5 10 15
Gly Met Gly Ala Thr Gly Thr Leu Arg Thr Ser Leu Asp Pro Ser Leu
20 25 30
Glu Ile Tyr Lys Lys Met Phe Glu Val Lys Arg Arg Glu Gln Leu Leu
35 40 45
Ala Leu Lys Asn Leu Ala Gln Leu Asn Asp Ile His Gln Gln Tyr Lys
50 55 60
Ile Leu Asp Val Met Leu Lys Gly Leu Phe Lys Val Leu Glu Asp Ser
65 70 75 80
Arg Thr Val Leu Thr Ala Ala Asp Val Leu Pro Asp Gly Pro Phe Pro
85 90 95
Gln Asp Glu Lys Leu Lys Asp Ala Phe Ser His Val Val Glu Asn Thr
100 105 110
Ala Phe Phe Gly Asp Val Val Leu Arg Phe Pro Arg Ile Val His Tyr
115 120 125
Tyr Phe Asp His Asn Ser Asn Trp Asn Leu Leu Ile Arg Trp Gly Ile
130 135 140
Ser Phe Cys Asn Gln Thr Gly Val Phe Asn Gln Gly Pro His Ser Pro
145 150 155 160
Ile Leu Ser Leu Met Ala Gln Glu Leu Gly Ile Ser Glu Lys Asp Ser
165 170 175
Asn Phe Gln Asn Pro Phe Lys Ile Asp Arg Thr Glu Phe Ile Pro Ser
180 185 190
Thr Asp Pro Phe Gln Lys Ala Leu Arg Glu Glu Glu Lys Arg Arg Lys
195 200 205
Lys Glu Glu Lys Arg Lys Glu Ile Arg Lys Gly Pro Arg Ile Ser Arg
210 215 220
Ser Gln Ser Glu Leu
225

<210> 668

<211> 406

<212> PRT

<213> Homo sapiens

<400> 668

Met Ser Gly Ala Pro Thr Ala Gly Ala Ala Leu Met Leu Cys Ala Ala
1 5 10 15

Thr	Ala	Val	Leu	Leu	Ser	Ala	Gln	Gly	Gly	Pro	Val	Gln	Ser	Lys	Ser		
			20					25					30				
Pro	Arg	Phe	Ala	Ser	Trp	Asp	Glu	Met	Asn	Val	Leu	Ala	His	Gly	Leu		
		35					40					45					
Leu	Gln	Leu	Gly	Gln	Gly	Leu	Arg	Glu	His	Ala	Glu	Arg	Thr	Arg	Ser		
	50					55					60						
Gln	Leu	Ser	Ala	Leu	Glu	Arg	Arg	Leu	Ser	Ala	Cys	Gly	Ser	Ala	Cys		
	65				70					75					80		
Gln	Gly	Thr	Glu	Gly	Ser	Thr	Asp	Leu	Pro	Leu	Ala	Pro	Glu	Ser	Arg		
				85					90					95			
Val	Asp	Pro	Glu	Val	Leu	His	Ser	Leu	Gln	Thr	Gln	Leu	Lys	Ala	Gln		
			100					105					110				
Asn	Ser	Arg	Ile	Gln	Gln	Leu	Phe	His	Lys	Val	Ala	Gln	Gln	Gln	Arg		
		115					120					125					
His	Leu	Glu	Lys	Gln	His	Leu	Arg	Ile	Gln	His	Leu	Gln	Ser	Gln	Phe		
	130					135					140						
Gly	Leu	Leu	Asp	His	Lys	His	Leu	Asp	His	Glu	Val	Ala	Lys	Pro	Ala		
	145				150					155					160		
Arg	Arg	Lys	Arg	Leu	Pro	Glu	Met	Ala	Gln	Pro	Val	Asp	Pro	Ala	His		
				165					170					175			
Asn	Val	Ser	Arg	Leu	His	Arg	Leu	Pro	Arg	Asp	Cys	Gln	Glu	Leu	Phe		
			180					185					190				
Gln	Val	Gly	Glu	Arg	Gln	Ser	Gly	Leu	Phe	Glu	Ile	Gln	Pro	Gln	Gly		
		195					200					205					
Ser	Pro	Pro	Phe	Leu	Val	Asn	Cys	Lys	Met	Thr	Ser	Asp	Gly	Gly	Trp		
	210					215					220						
Thr	Val	Ile	Gln	Arg	Arg	His	Asp	Gly	Ser	Val	Asp	Phe	Asn	Arg	Pro		
	225				230					235					240		
Trp	Glu	Ala	Tyr	Lys	Ala	Gly	Phe	Gly	Asp	Pro	His	Gly	Glu	Phe	Trp		
				245				250						255			
Leu	Gly	Leu	Glu	Lys	Val	His	Ser	Ile	Thr	Gly	Asp	Arg	Asn	Ser	Arg		
			260					265					270				
Leu	Ala	Val	Gln	Leu	Arg	Asp	Trp	Asp	Gly	Asn	Ala	Glu	Leu	Leu	Gln		
		275					280					285					
Phe	Ser	Val	His	Leu	Gly	Gly	Glu	Asp	Thr	Ala	Tyr	Ser	Leu	Gln	Leu		
	290					295					300						
Thr	Ala	Pro	Val	Ala	Gly	Gln	Leu	Gly	Ala	Thr	Thr	Val	Pro	Pro	Ser		
	305				310					315					320		

Gly Leu Ser Val Pro Phe Ser Thr Trp Asp Gln Asp His Asp Leu Arg
 325 330 335
 Arg Asp Lys Asn Cys Ala Lys Ser Leu Ser Gly Gly Trp Trp Phe Gly
 340 345 350
 Thr Cys Ser His Ser Asn Leu Asn Gly Gln Tyr Phe Arg Ser Ile Pro
 355 360 365
 Gln Gln Arg Gln Lys Leu Lys Lys Gly Ile Phe Trp Lys Thr Trp Arg
 370 375 380
 Gly Arg Tyr Tyr Pro Leu Gln Ala Thr Thr Met Leu Ile Gln Pro Met
 385 390 395 400
 Ala Ala Glu Ala Ala Ser
 405

<210> 669
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 669
 Met Ala Ser Arg Ser Met Arg Leu Leu Leu Leu Leu Ser Cys Leu Ala
 1 5 10 15
 Lys Thr Gly Val Leu Gly Asp Ile Ile Met Arg Pro Ser Cys Ala Pro
 20 25 30
 Gly Trp Phe Tyr His Lys Ser Asn Cys Tyr Gly Tyr Phe Arg Lys Leu
 35 40 45
 Arg Asn Trp Ser Asp Ala Glu Leu Glu Cys Gln Ser Tyr Gly Asn Gly
 50 55 60
 Ala His Leu Ala Ser Ile Leu Ser Leu Lys Glu Ala Ser Thr Ile Ala
 65 70 75 80
 Glu Tyr Ile Ser Gly Tyr Gln Arg Ser Gln Pro Ile Trp Ile Gly Leu
 85 90 95
 His Asp Pro Gln Lys Arg Gln Gln Trp Gln Trp Ile Asp Gly Ala Met
 100 105 110
 Tyr Leu Tyr Arg Ser Trp Ser Gly Lys Ser Met Gly Gly Asn Lys His
 115 120 125
 Cys Ala Glu Met Ser Ser Asn Asn Asn Phe Leu Thr Trp Ser Ser Asn
 130 135 140
 Glu Cys Asn Lys Arg Gln His Phe Leu Cys Lys Tyr Arg Pro
 145 150 155

<210> 670
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 670
 Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15
 Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
 20 25 30
 Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
 35 40 45
 Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 50 55 60

<210> 671
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 671
 Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15
 Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
 20 25 30
 Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
 35 40 45
 Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 50 55 60

<210> 672
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 672
 Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15
 Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
 20 25 30
 Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
 35 40 45
 Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 50 55 60

<210> 673
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 673
 Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15
 Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
 20 25 30
 Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
 35 40 45
 Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 50 55 60

<210> 674
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 674
 Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15
 Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
 20 25 30
 Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
 35 40 45
 Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn Asp
 50 55 60
 Ala His Lys Ser Glu Val Ala His Arg Phe Lys Val
 65 70 75

<210> 675
 <211> 180
 <212> PRT
 <213> Homo sapiens

<400> 675
 Met Lys Ser Ile Tyr Phe Val Ala Gly Leu Phe Val Met Leu Val Gln
 1 5 10 15
 Gly Ser Trp Gln Arg Ser Leu Gln Asp Thr Glu Glu Lys Ser Arg Ser
 20 25 30
 Phe Ser Ala Ser Gln Ala Asp Pro Leu Ser Asp Pro Asp Gln Met Asn

35					40					45					
Glu	Asp	Lys	Arg	His	Ser	Gln	Gly	Thr	Phe	Thr	Ser	Asp	Tyr	Ser	Lys
	50					55					60				
Tyr	Leu	Asp	Ser	Arg	Arg	Ala	Gln	Asp	Phe	Val	Gln	Trp	Leu	Met	Asn
65					70					75					80
Thr	Lys	Arg	Asn	Arg	Asn	Asn	Ile	Ala	Lys	Arg	His	Asp	Glu	Phe	Glu
			85						90					95	
Arg	His	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val	Ser	Ser	Tyr	Leu	Glu
			100					105					110		
Gly	Gln	Ala	Ala	Lys	Glu	Phe	Ile	Ala	Trp	Leu	Val	Lys	Gly	Arg	Gly
		115					120					125			
Arg	Arg	Asp	Phe	Pro	Glu	Glu	Val	Ala	Ile	Val	Glu	Glu	Leu	Gly	Arg
	130					135					140				
Arg	His	Ala	Asp	Gly	Ser	Phe	Ser	Asp	Glu	Met	Asn	Thr	Ile	Leu	Asp
145					150					155					160
Asn	Leu	Ala	Ala	Arg	Asp	Phe	Ile	Asn	Trp	Leu	Ile	Gln	Thr	Lys	Ile
				165					170					175	
Thr	Asp	Arg	Lys												
			180												

<210> 676
 <211> 180
 <212> PRT
 <213> Homo sapiens

<400> 676															
Met	Lys	Ser	Ile	Tyr	Phe	Val	Ala	Gly	Leu	Phe	Val	Met	Leu	Val	Gln
1				5					10					15	
Gly	Ser	Trp	Gln	Arg	Ser	Leu	Gln	Asp	Thr	Glu	Glu	Lys	Ser	Arg	Ser
			20					25					30		
Phe	Ser	Ala	Ser	Gln	Ala	Asp	Pro	Leu	Ser	Asp	Pro	Asp	Gln	Met	Asn
		35				40						45			
Glu	Asp	Lys	Arg	His	Ser	Gln	Gly	Thr	Phe	Thr	Ser	Asp	Tyr	Ser	Lys
	50					55					60				
Tyr	Leu	Asp	Ser	Arg	Arg	Ala	Gln	Asp	Phe	Val	Gln	Trp	Leu	Met	Asn
65					70					75					80
Thr	Lys	Arg	Asn	Arg	Asn	Asn	Ile	Ala	Lys	Arg	His	Asp	Glu	Phe	Glu
			85						90					95	
Arg	His	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val	Ser	Ser	Tyr	Leu	Glu
			100					105					110		

Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
 115 120 125
 Arg Arg Asp Phe Pro Glu Glu Val Ala Ile Val Glu Glu Leu Gly Arg
 130 135 140
 Arg His Ala Asp Gly Ser Phe Ser Asp Glu Met Asn Thr Ile Leu Asp
 145 150 155 160
 Asn Leu Ala Ala Arg Asp Phe Ile Asn Trp Leu Ile Gln Thr Lys Ile
 165 170 175
 Thr Asp Arg Lys
 180

<210> 677
 <211> 229
 <212> PRT
 <213> Homo sapiens

<400> 677
 Met Asp Leu Leu Gln Phe Leu Ala Phe Leu Phe Val Leu Leu Leu Ser
 1 5 10 15
 Gly Met Gly Ala Thr Gly Thr Leu Arg Thr Ser Leu Asp Pro Ser Leu
 20 25 30
 Glu Ile Tyr Lys Lys Met Phe Glu Val Lys Arg Arg Glu Gln Leu Leu
 35 40 45
 Ala Leu Lys Asn Leu Ala Gln Leu Asn Asp Ile His Gln Gln Tyr Lys
 50 55 60
 Ile Leu Asp Val Met Leu Lys Gly Leu Phe Lys Val Leu Glu Asp Ser
 65 70 75 80
 Arg Thr Val Leu Thr Ala Ala Asp Val Leu Pro Asp Gly Pro Phe Pro
 85 90 95
 Gln Asp Glu Lys Leu Lys Asp Ala Phe Ser His Val Val Glu Asn Thr
 100 105 110
 Ala Phe Phe Gly Asp Val Val Leu Arg Phe Pro Arg Ile Val His Tyr
 115 120 125
 Tyr Phe Asp His Asn Ser Asn Trp Asn Leu Leu Ile Arg Trp Gly Ile
 130 135 140
 Ser Phe Cys Asn Gln Thr Gly Val Phe Asn Gln Gly Pro His Ser Pro
 145 150 155 160
 Ile Leu Ser Leu Met Ala Gln Glu Leu Gly Ile Ser Glu Lys Asp Ser
 165 170 175
 Asn Phe Gln Asn Pro Phe Lys Ile Asp Arg Thr Glu Phe Ile Pro Ser

	180		185		190										
Thr	Asp	Pro	Phe	Gln	Lys	Ala	Leu	Arg	Glu	Glu	Glu	Lys	Arg	Arg	Lys
		195					200					205			
Lys	Glu	Glu	Lys	Arg	Lys	Glu	Ile	Arg	Lys	Gly	Pro	Arg	Ile	Ser	Arg
	210					215					220				
Ser	Gln	Ser	Glu	Leu											
225															

<210> 678
 <211> 229
 <212> PRT
 <213> Homo sapiens

<400> 678															
Met	Asp	Leu	Leu	Gln	Phe	Leu	Ala	Phe	Leu	Phe	Val	Leu	Leu	Leu	Ser
1				5					10					15	
Gly	Met	Gly	Ala	Thr	Gly	Thr	Leu	Arg	Thr	Ser	Leu	Asp	Pro	Ser	Leu
			20					25					30		
Glu	Ile	Tyr	Lys	Lys	Met	Phe	Glu	Val	Lys	Arg	Arg	Glu	Gln	Leu	Leu
		35					40					45			
Ala	Leu	Lys	Asn	Leu	Ala	Gln	Leu	Asn	Asp	Ile	His	Gln	Gln	Tyr	Lys
	50					55					60				
Ile	Leu	Asp	Val	Met	Leu	Lys	Gly	Leu	Phe	Lys	Val	Leu	Glu	Asp	Ser
	65				70					75					80
Arg	Thr	Val	Leu	Thr	Ala	Ala	Asp	Val	Leu	Pro	Asp	Gly	Pro	Phe	Pro
				85					90					95	
Gln	Asp	Glu	Lys	Leu	Lys	Asp	Ala	Phe	Ser	His	Val	Val	Glu	Asn	Thr
			100					105					110		
Ala	Phe	Phe	Gly	Asp	Val	Val	Leu	Arg	Phe	Pro	Arg	Ile	Val	His	Tyr
			115				120					125			
Tyr	Phe	Asp	His	Asn	Ser	Asn	Trp	Asn	Leu	Leu	Ile	Arg	Trp	Gly	Ile
	130					135					140				
Ser	Phe	Cys	Asn	Gln	Thr	Gly	Val	Phe	Asn	Gln	Gly	Pro	His	Ser	Pro
145					150					155					160
Ile	Leu	Ser	Leu	Met	Ala	Gln	Glu	Leu	Gly	Ile	Ser	Glu	Lys	Asp	Ser
				165					170					175	
Asn	Phe	Gln	Asn	Pro	Phe	Lys	Ile	Asp	Arg	Thr	Glu	Phe	Ile	Pro	Ser
			180					185					190		
Thr	Asp	Pro	Phe	Gln	Lys	Ala	Leu	Arg	Glu	Glu	Glu	Lys	Arg	Arg	Lys
		195					200						205		

Lys Glu Glu Lys Arg Lys Glu Ile Arg Lys Gly Pro Arg Ile Ser Arg
 210 215 220

Ser Gln Ser Glu Leu
 225

<210> 679
 <211> 229
 <212> PRT
 <213> Homo sapiens

<400> 679

Met Asp Leu Leu Gln Phe Leu Ala Phe Leu Phe Val Leu Leu Leu Ser
 1 5 10 15

Gly Met Gly Ala Thr Gly Thr Leu Arg Thr Ser Leu Asp Pro Ser Leu
 20 25 30

Glu Ile Tyr Lys Lys Met Phe Glu Val Lys Arg Arg Glu Gln Leu Leu
 35 40 45

Ala Leu Lys Asn Leu Ala Gln Leu Asn Asp Ile His Gln Gln Tyr Lys
 50 55 60

Ile Leu Asp Val Met Leu Lys Gly Leu Phe Lys Val Leu Glu Asp Ser
 65 70 75 80

Arg Thr Val Leu Thr Ala Ala Asp Val Leu Pro Asp Gly Pro Phe Pro
 85 90 95

Gln Asp Glu Lys Leu Lys Asp Ala Phe Ser His Val Val Glu Asn Thr
 100 105 110

Ala Phe Phe Gly Asp Val Val Leu Arg Phe Pro Arg Ile Val His Tyr
 115 120 125

Tyr Phe Asp His Asn Ser Asn Trp Asn Leu Leu Ile Arg Trp Gly Ile
 130 135 140

Ser Phe Cys Asn Gln Thr Gly Val Phe Asn Gln Gly Pro His Ser Pro
 145 150 155 160

Ile Leu Ser Leu Met Ala Gln Glu Leu Gly Ile Ser Glu Lys Asp Ser
 165 170 175

Asn Phe Gln Asn Pro Phe Lys Ile Asp Arg Thr Glu Phe Ile Pro Ser
 180 185 190

Thr Asp Pro Phe Gln Lys Ala Leu Arg Glu Glu Glu Lys Arg Arg Lys
 195 200 205

Lys Glu Glu Lys Arg Lys Glu Ile Arg Lys Gly Pro Arg Ile Ser Arg
 210 215 220

Ser Gln Ser Glu Leu
225

<210> 680

<211> 229

<212> PRT

<213> Homo sapiens

<400> 680

Met Asp Leu Leu Gln Phe Leu Ala Phe Leu Phe Val Leu Leu Leu Ser
1 5 10 15

Gly Met Gly Ala Thr Gly Thr Leu Arg Thr Ser Leu Asp Pro Ser Leu
20 25 30

Glu Ile Tyr Lys Lys Met Phe Glu Val Lys Arg Arg Glu Gln Leu Leu
35 40 45

Ala Leu Lys Asn Leu Ala Gln Leu Asn Asp Ile His Gln Gln Tyr Lys
50 55 60

Ile Leu Asp Val Met Leu Lys Gly Leu Phe Lys Val Leu Glu Asp Ser
65 70 75 80

Arg Thr Val Leu Thr Ala Ala Asp Val Leu Pro Asp Gly Pro Phe Pro
85 90 95

Gln Asp Glu Lys Leu Lys Asp Ala Phe Ser His Val Val Glu Asn Thr
100 105 110

Ala Phe Phe Gly Asp Val Val Leu Arg Phe Pro Arg Ile Val His Tyr
115 120 125

Tyr Phe Asp His Asn Ser Asn Trp Asn Leu Leu Ile Arg Trp Gly Ile
130 135 140

Ser Phe Cys Asn Gln Thr Gly Val Phe Asn Gln Gly Pro His Ser Pro
145 150 155 160

Ile Leu Ser Leu Met Ala Gln Glu Leu Gly Ile Ser Glu Lys Asp Ser
165 170 175

Asn Phe Gln Asn Pro Phe Lys Ile Asp Arg Thr Glu Phe Ile Pro Ser
180 185 190

Thr Asp Pro Phe Gln Lys Ala Leu Arg Glu Glu Glu Lys Arg Arg Lys
195 200 205

Lys Glu Glu Lys Arg Lys Glu Ile Arg Lys Gly Pro Arg Ile Ser Arg
210 215 220

Ser Gln Ser Glu Leu
225

<210> 681
 <211> 244
 <212> PRT
 <213> Homo sapiens

<400> 681

Met	Leu	Leu	Leu	Gly	Ala	Val	Leu	Leu	Leu	Leu	Ala	Leu	Pro	Gly	His
1				5					10					15	
Asp	Gln	Glu	Thr	Thr	Thr	Gln	Gly	Pro	Gly	Val	Leu	Leu	Pro	Leu	Pro
			20					25					30		
Lys	Gly	Ala	Cys	Thr	Gly	Trp	Met	Ala	Gly	Ile	Pro	Gly	His	Pro	Gly
		35					40					45			
His	Asn	Gly	Ala	Pro	Gly	Arg	Asp	Gly	Arg	Asp	Gly	Thr	Pro	Gly	Glu
	50					55					60				
Lys	Gly	Glu	Lys	Gly	Asp	Pro	Gly	Leu	Ile	Gly	Pro	Lys	Gly	Asp	Ile
	65				70					75					80
Gly	Glu	Thr	Gly	Val	Pro	Gly	Ala	Glu	Gly	Pro	Arg	Gly	Phe	Pro	Gly
				85					90					95	
Ile	Gln	Gly	Arg	Lys	Gly	Glu	Pro	Gly	Glu	Gly	Ala	Tyr	Val	Tyr	Arg
			100					105					110		
Ser	Ala	Phe	Ser	Val	Gly	Leu	Glu	Thr	Tyr	Val	Thr	Ile	Pro	Asn	Met
		115					120					125			
Pro	Ile	Arg	Phe	Thr	Lys	Ile	Phe	Tyr	Asn	Gln	Gln	Asn	His	Tyr	Asp
	130					135					140				
Gly	Ser	Thr	Gly	Lys	Phe	His	Cys	Asn	Ile	Pro	Gly	Leu	Tyr	Tyr	Phe
	145				150					155					160
Ala	Tyr	His	Ile	Thr	Val	Tyr	Met	Lys	Asp	Val	Lys	Val	Ser	Leu	Phe
				165					170					175	
Lys	Lys	Asp	Lys	Ala	Met	Leu	Phe	Thr	Tyr	Asp	Gln	Tyr	Gln	Glu	Asn
			180					185					190		
Asn	Val	Asp	Gln	Ala	Ser	Gly	Ser	Val	Leu	Leu	His	Leu	Glu	Val	Gly
		195					200					205			
Asp	Gln	Val	Trp	Leu	Gln	Val	Tyr	Gly	Glu	Gly	Glu	Arg	Asn	Gly	Leu
	210					215					220				
Tyr	Ala	Asp	Asn	Asp	Asn	Asp	Ser	Thr	Phe	Thr	Gly	Phe	Leu	Leu	Tyr
	225				230					235					240
His	Asp	Thr	Asn												

<210> 682
 <211> 244
 <212> PRT
 <213> Homo sapiens

<400> 682

Met	Leu	Leu	Leu	Gly	Ala	Val	Leu	Leu	Leu	Leu	Ala	Leu	Pro	Gly	His
1				5					10					15	
Asp	Gln	Glu	Thr	Thr	Thr	Gln	Gly	Pro	Gly	Val	Leu	Leu	Pro	Leu	Pro
			20					25					30		
Lys	Gly	Ala	Cys	Thr	Gly	Trp	Met	Ala	Gly	Ile	Pro	Gly	His	Pro	Gly
		35					40					45			
His	Asn	Gly	Ala	Pro	Gly	Arg	Asp	Gly	Arg	Asp	Gly	Thr	Pro	Gly	Glu
	50					55					60				
Lys	Gly	Glu	Lys	Gly	Asp	Pro	Gly	Leu	Ile	Gly	Pro	Lys	Gly	Asp	Ile
	65				70					75					80
Gly	Glu	Thr	Gly	Val	Pro	Gly	Ala	Glu	Gly	Pro	Arg	Gly	Phe	Pro	Gly
				85					90					95	
Ile	Gln	Gly	Arg	Lys	Gly	Glu	Pro	Gly	Glu	Gly	Ala	Tyr	Val	Tyr	Arg
			100					105					110		
Ser	Ala	Phe	Ser	Val	Gly	Leu	Glu	Thr	Tyr	Val	Thr	Ile	Pro	Asn	Met
		115					120					125			
Pro	Ile	Arg	Phe	Thr	Lys	Ile	Phe	Tyr	Asn	Gln	Gln	Asn	His	Tyr	Asp
		130				135						140			
Gly	Ser	Thr	Gly	Lys	Phe	His	Cys	Asn	Ile	Pro	Gly	Leu	Tyr	Tyr	Phe
	145				150					155					160
Ala	Tyr	His	Ile	Thr	Val	Tyr	Met	Lys	Asp	Val	Lys	Val	Ser	Leu	Phe
				165					170					175	
Lys	Lys	Asp	Lys	Ala	Met	Leu	Phe	Thr	Tyr	Asp	Gln	Tyr	Gln	Glu	Asn
			180					185					190		
Asn	Val	Asp	Gln	Ala	Ser	Gly	Ser	Val	Leu	Leu	His	Leu	Glu	Val	Gly
		195					200					205			
Asp	Gln	Val	Trp	Leu	Gln	Val	Tyr	Gly	Glu	Gly	Glu	Arg	Asn	Gly	Leu
	210					215					220				
Tyr	Ala	Asp	Asn	Asp	Asn	Asp	Ser	Thr	Phe	Thr	Gly	Phe	Leu	Leu	Tyr
	225				230					235					240
His	Asp	Thr	Asn												

<210> 683
 <211> 244

<212> PRT

<213> Homo sapiens

<400> 683

Met Leu Leu Leu Gly Ala Val Leu Leu Leu Leu Ala Leu Pro Gly His
1 5 10 15

Asp Gln Glu Thr Thr Thr Gln Gly Pro Gly Val Leu Leu Pro Leu Pro
20 25 30

Lys Gly Ala Cys Thr Gly Trp Met Ala Gly Ile Pro Gly His Pro Gly
35 40 45

His Asn Gly Ala Pro Gly Arg Asp Gly Arg Asp Gly Thr Pro Gly Glu
50 55 60

Lys Gly Glu Lys Gly Asp Pro Gly Leu Ile Gly Pro Lys Gly Asp Ile
65 70 75 80

Gly Glu Thr Gly Val Pro Gly Ala Glu Gly Pro Arg Gly Phe Pro Gly
85 90 95

Ile Gln Gly Arg Lys Gly Glu Pro Gly Glu Gly Ala Tyr Val Tyr Arg
100 105 110

Ser Ala Phe Ser Val Gly Leu Glu Thr Tyr Val Thr Ile Pro Asn Met
115 120 125

Pro Ile Arg Phe Thr Lys Ile Phe Tyr Asn Gln Gln Asn His Tyr Asp
130 135 140

Gly Ser Thr Gly Lys Phe His Cys Asn Ile Pro Gly Leu Tyr Tyr Phe
145 150 155 160

Ala Tyr His Ile Thr Val Tyr Met Lys Asp Val Lys Val Ser Leu Phe
165 170 175

Lys Lys Asp Lys Ala Met Leu Phe Thr Tyr Asp Gln Tyr Gln Glu Asn
180 185 190

Asn Val Asp Gln Ala Ser Gly Ser Val Leu Leu His Leu Glu Val Gly
195 200 205

Asp Gln Val Trp Leu Gln Val Tyr Gly Glu Gly Glu Arg Asn Gly Leu
210 215 220

Tyr Ala Asp Asn Asp Asn Asp Ser Thr Phe Thr Gly Phe Leu Leu Tyr
225 230 235 240

His Asp Thr Asn

<210> 684

<211> 83

<212> PRT

<213> Homo sapiens

<400> 684

Met Lys Leu Ala Tyr Ser Leu Leu Leu Pro Leu Ala Gly Val Ser Ala
1 5 10 15
Ser Val Ile Asn Tyr Lys Arg His Gly Glu Gly Thr Phe Thr Ser Asp
20 25 30
Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp
35 40 45
Leu Val Lys Gly Arg His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser
50 55 60
Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val
65 70 75 80
Lys Gly Arg

<210> 685

<211> 145

<212> PRT

<213> Homo sapiens

<400> 685

Met Arg Phe Pro Ser Ile Phe Thr Ala Val Leu Phe Ala Ala Ser Ser
1 5 10 15
Ala Leu Ala Ala Pro Val Asn Thr Thr Thr Glu Asp Glu Thr Ala Gln
20 25 30
Ile Pro Ala Glu Ala Val Ile Gly Tyr Ser Asp Leu Glu Gly Asp Phe
35 40 45
Asp Val Ala Val Leu Pro Phe Ser Asn Ser Thr Asn Asn Gly Leu Leu
50 55 60
Phe Ile Asn Thr Thr Ile Ala Ser Ile Ala Ala Lys Glu Glu Gly Val
65 70 75 80
Ser Leu Asp Lys Arg His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser
85 90 95
Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val
100 105 110
Lys Gly Arg His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr
115 120 125
Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
130 135 140
Arg
145

<210> 686
 <211> 77
 <212> PRT
 <213> Homo sapiens

<400> 686
 Met Phe Lys Ser Val Val Tyr Ser Ile Leu Ala Ala Ser Leu Ala Asn
 1 5 10 15
 Ala His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu
 20 25 30
 Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg His
 35 40 45
 Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly Gln
 50 55 60
 Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg
 65 70 75

<210> 687
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 687
 Met Arg Phe Pro Ser Ile Phe Thr Ala Val Leu Phe Ala Ala Ser Ser
 1 5 10 15
 Ala Leu Ala Ala Pro Val Asn Thr Thr Thr Glu Asp Glu Thr Ala Gln
 20 25 30
 Ile Pro Ala Glu Ala Val Ile Gly Tyr Ser Asp Leu Glu Gly Asp Phe
 35 40 45
 Asp Val Ala Val Leu Pro Phe Ser Asn Ser Thr Asn Asn Gly Leu Leu
 50 55 60
 Phe Ile Asn Thr Thr Ile Ala Ser Ile Ala Ala Lys Glu Glu Gly Val
 65 70 75 80
 Ser Leu Asp Lys Arg His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser
 85 90 95
 Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val
 100 105 110
 Lys Gly Arg His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr
 115 120 125
 Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
 130 135 140

Arg
145

<210> 688
<211> 83
<212> PRT
<213> Homo sapiens

<400> 688
Met Lys Leu Ala Tyr Ser Leu Leu Leu Pro Leu Ala Gly Val Ser Ala
1 5 10 15
Ser Val Ile Asn Tyr Lys Arg His Gly Glu Gly Thr Phe Thr Ser Asp
20 25 30
Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp
35 40 45
Leu Val Lys Gly Arg His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser
50 55 60
Ser Tyr Leu Glu Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val
65 70 75 80
Lys Gly Arg

<210> 689
<211> 77
<212> PRT
<213> Homo sapiens

<400> 689
Met Phe Lys Ser Val Val Tyr Ser Ile Leu Ala Ala Ser Leu Ala Asn
1 5 10 15
Ala His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu
20 25 30
Gly Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg His
35 40 45
Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly Gln
50 55 60
Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg
65 70 75

<210> 690
<211> 31

<212> PRT

<213> Homo sapiens

<400> 690

Glu Ala Glu Asp Leu Gln Val Gly Gln Val Glu Leu Gly Gly Gly Pro
1 5 10 15

Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu Gly Ser Leu Gln
20 25 30

<210> 691

<211> 131

<212> PRT

<213> Homo sapiens

<400> 691

Val Pro Ala Pro Lys Val Pro Ile Lys Met Gln Val Lys His Trp Pro
1 5 10 15

Ser Glu Gln Asp Pro Glu Lys Ala Trp Gly Ala Arg Val Val Glu Pro
20 25 30

Pro Glu Lys Asp Asp Gln Leu Val Val Leu Phe Pro Val Gln Lys Pro
35 40 45

Lys Leu Leu Thr Thr Glu Glu Lys Pro Arg Gly Gln Gly Arg Gly Pro
50 55 60

Ile Leu Pro Gly Thr Lys Ala Trp Met Glu Thr Glu Asp Thr Leu Gly
65 70 75 80

Arg Val Leu Ser Pro Glu Pro Asp His Asp Ser Leu Tyr His Pro Pro
85 90 95

Pro Glu Glu Asp Gln Gly Glu Glu Arg Pro Arg Leu Trp Val Met Pro
100 105 110

Asn His Gln Val Leu Leu Gly Pro Glu Glu Asp Gln Asp His Ile Tyr
115 120 125

His Pro Gln
130

<210> 692

<211> 36

<212> PRT

<213> Homo sapiens

<400> 692

Tyr Pro Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Ser Pro Glu Glu
1 5 10 15

Leu Asn Arg Tyr Tyr Ala Ser Leu Arg His Tyr Leu Asn Leu Val Thr
20 25 30

Arg Gln Arg Tyr
35

<210> 693
<211> 34
<212> PRT
<213> Homo sapiens

<400> 693
Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Ser Pro Glu Glu Leu Asn
1 5 10 15
Arg Tyr Tyr Ala Ser Leu Arg His Tyr Leu Asn Leu Val Thr Arg Gln
20 25 30

Arg Tyr

<210> 694
<211> 34
<212> PRT
<213> Homo sapiens

<400> 694
Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Ser Pro Glu Glu Leu Asn
1 5 10 15
Arg Tyr Tyr Ala Ser Leu Arg His Tyr Leu Asn Leu Val Thr Arg Gln
20 25 30

Arg Tyr

<210> 695
<211> 34
<212> PRT
<213> Homo sapiens

<400> 695
Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Ser Pro Glu Glu Leu Asn
1 5 10 15
Arg Tyr Tyr Ala Ser Leu Arg His Tyr Leu Asn Leu Val Thr Arg Gln
20 25 30

Arg Tyr

<210> 696
<211> 63

<212> PRT

<213> Homo sapiens

<400> 696

Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
1 5 10 15

Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
20 25 30

Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
35 40 45

Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
50 55 60

<210> 697

<211> 63

<212> PRT

<213> Homo sapiens

<400> 697

Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
1 5 10 15

Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Gly Tyr
20 25 30

Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr Gly Ile Val Glu Gln Cys
35 40 45

Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
50 55 60

<210> 698

<211> 30

<212> PRT

<213> Homo sapiens

<400> 698

His Gly Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg
20 25 30

<210> 699

<211> 389

<212> PRT

<213> Homo sapiens

<400> 699

Met Leu Glu Glu Pro Arg Pro Arg Pro Pro Pro Ser Gly Leu Ala Gly
1 5 10 15
Leu Leu Phe Leu Ala Leu Cys Ser Arg Ala Leu Ser Asn Glu Ile Leu
20 25 30
Gly Leu Lys Leu Pro Gly Glu Pro Pro Leu Thr Ala Asn Thr Val Cys
35 40 45
Leu Thr Leu Ser Gly Leu Ser Lys Arg Gln Leu Asp Leu Cys Leu Arg
50 55 60
Asn Pro Asp Val Thr Ala Ser Ala Leu Gln Gly Leu His Ile Ala Val
65 70 75 80
His Glu Cys Gln His Gln Leu Arg Asp Gln Arg Trp Asn Cys Ser Ala
85 90 95
Leu Glu Gly Gly Gly Arg Leu Pro His His Ser Ala Ile Leu Lys Arg
100 105 110
Gly Phe Arg Glu Ser Ala Phe Ser Phe Ser Met Leu Ala Ala Gly Val
115 120 125
Met His Ala Val Ala Thr Ala Cys Ser Leu Gly Lys Leu Val Ser Cys
130 135 140
Gly Cys Gly Trp Lys Gly Ser Gly Glu Gln Asp Arg Leu Arg Ala Lys
145 150 155 160
Leu Leu Gln Leu Gln Ala Leu Ser Arg Gly Lys Ser Phe Pro His Ser
165 170 175
Leu Pro Ser Pro Gly Pro Gly Ser Ser Pro Ser Pro Gly Pro Gln Asp
180 185 190
Thr Trp Glu Trp Gly Gly Cys Asn His Asp Met Asp Phe Gly Glu Lys
195 200 205
Phe Ser Arg Asp Phe Leu Asp Ser Arg Glu Ala Pro Arg Asp Ile Gln
210 215 220
Ala Arg Met Arg Ile His Asn Asn Arg Val Gly Arg Gln Val Val Thr
225 230 235 240
Glu Asn Leu Lys Arg Lys Cys Lys Cys His Gly Thr Ser Gly Ser Cys
245 250 255
Gln Phe Lys Thr Cys Trp Arg Ala Ala Pro Glu Phe Arg Ala Val Gly
260 265 270
Ala Ala Leu Arg Glu Arg Leu Gly Arg Ala Ile Phe Ile Asp Thr His
275 280 285
Asn Arg Asn Ser Gly Ala Phe Gln Pro Arg Leu Arg Pro Arg Arg Leu
290 295 300

Ser Gly Glu Leu Val Tyr Phe Glu Lys Ser Pro Asp Phe Cys Glu Arg
 305 310 315 320
 Asp Pro Thr Met Gly Ser Pro Gly Thr Arg Gly Arg Ala Cys Asn Lys
 325 330 335
 Thr Ser Arg Leu Leu Asp Gly Cys Gly Ser Leu Cys Cys Gly Arg Gly
 340 345 350
 His Asn Val Leu Arg Gln Thr Arg Val Glu Arg Cys His Cys Arg Phe
 355 360 365
 His Trp Cys Cys Tyr Val Leu Cys Asp Glu Cys Lys Val Thr Glu Trp
 370 375 380
 Val Asn Val Cys Lys
 385

<210> 700
 <211> 68
 <212> PRT
 <213> Homo sapiens

<400> 700
 Glu Ala Ala Leu Gly Leu Glu Ala Glu Asp Leu Gln Val Gly Gln Val
 1 5 10 15
 Glu Leu Gly Gly Gly Pro Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu
 20 25 30
 Glu Gly Ser Leu Gln Glu Ala Glu Asp Leu Gln Val Gly Gln Val Glu
 35 40 45
 Leu Gly Gly Gly Pro Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu
 50 55 60
 Gly Ser Leu Gln
 65

<210> 701
 <211> 58
 <212> PRT
 <213> Homo sapiens

<400> 701
 Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15
 Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Glu Ala
 20 25 30
 Glu Asp Leu Gln Val Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys
 35 40 45

Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 50 55

<210> 702
 <211> 58
 <212> PRT
 <213> Homo sapiens

<400> 702
 Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
 1 5 10 15
 Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Glu Ala
 20 25 30
 Glu Asp Leu Gln Val Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys
 35 40 45
 Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
 50 55

<210> 703
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 703
 Met Glu Ser Ser Arg Val Arg Leu Leu Pro Leu Leu Gly Ala Ala Leu
 1 5 10 15
 Leu Leu Met Leu Pro Leu Leu Gly Thr Arg Ala Gln Glu Asp Ala Glu
 20 25 30
 Leu Gln Pro Arg Ala Leu Asp Ile Tyr Ser Ala Val Asp Asp Ala Ser
 35 40 45
 His Glu Lys Glu Leu Ile Glu Ala Leu Gln Glu Val Leu Lys Lys Leu
 50 55 60
 Lys Ser Lys Arg Val Pro Ile Tyr Glu Lys Lys Tyr Gly Gln Val Pro
 65 70 75 80
 Met Cys Asp Ala Gly Glu Gln Cys Ala Val Arg Lys Gly Ala Arg Ile
 85 90 95
 Gly Lys Leu Cys Asp Cys Pro Arg Gly Thr Ser Cys Asn Ser Phe Leu
 100 105 110
 Leu Lys Cys Leu
 115

<210> 704
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 704
 Val Pro Ala Pro Lys Val Pro Ile Lys Met Gln Val Lys His Trp Pro
 1 5 10 15
 Ser Glu Gln Asp Pro Glu Lys Ala Trp Gly Ala Arg Val Val Glu Pro
 20 25 30
 Pro Glu Lys Asp Asp Gln Leu Val Val Leu Phe Pro Val Gln Lys Pro
 35 40 45
 Lys Leu Leu Thr Thr Glu Glu Lys Pro Arg Gly Gln Gly Arg Gly Pro
 50 55 60
 Ile Leu Pro Gly Thr Lys Ala Trp Met Glu Thr Glu Asp Thr Leu Gly
 65 70 75 80
 Arg Val Leu Ser Pro Glu Pro Asp His Asp Ser Leu Tyr His Pro Pro
 85 90 95
 Pro Glu Glu Asp Gln Gly Glu Glu Arg Pro Arg Leu Trp Val Met Pro
 100 105 110
 Asn His Gln Val Leu Leu Gly Pro Glu Glu Asp Gln Asp His Ile Tyr
 115 120 125
 His Pro Gln
 130

<210> 705
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 705
 Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Ser Pro Glu Glu Leu Asn
 1 5 10 15
 Arg Tyr Tyr Ala Ser Leu Arg His Tyr Leu Asn Leu Val Thr Arg Gln
 20 25 30
 Arg Tyr

<210> 706
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 706
 Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Ser Pro Glu Glu Leu Asn
 1 5 10 15
 Arg Tyr Tyr Ala Ser Leu Arg His Tyr Leu Asn Leu Val Thr Arg Gln
 20 25 30

Arg Tyr

<210> 707
 <211> 33
 <212> DNA
 <213> Homo sapiens

<400> 707
 aggagcgtcg acaaaagatt cgттаaccaa cac 33

<210> 708
 <211> 26
 <212> DNA
 <213> Homo sapiens

<400> 708
 cttcaaatgg асactgctga agatac 26

<210> 709
 <211> 20
 <212> DNA
 <213> Homo sapiens

<400> 709
 cctgctttgc cgaggagggt 20

<210> 710
 <211> 28
 <212> DNA
 <213> Homo sapiens

<400> 710
 taaaatacac accgagattc atcaactc 28

<210> 711
 <211> 33
 <212> DNA
 <213> Homo sapiens

<400> 711
 aggagcgtcg acaaaagatt cgттаaccaa cac 33

<210> 712
 <211> 26
 <212> DNA
 <213> Homo sapiens

<400> 712
 cttcaaatgg асactgctga agatac 26

<210> 713
 <211> 20
 <212> DNA
 <213> Homo sapiens

 <400> 713
 cctgctttgc cgaggagggt 20

 <210> 714
 <211> 28
 <212> DNA
 <213> Homo sapiens

 <400> 714
 taaaatacac accgagattc atcaactc 28

 <210> 715
 <211> 29
 <212> DNA
 <213> Homo sapiens

 <400> 715
 gcattcgta accaactt gtgtgggtc 29

 <210> 716
 <211> 28
 <212> DNA
 <213> Homo sapiens

 <400> 716
 aatctttaaa tcgatgagca acctcact 28

 <210> 717
 <211> 29
 <212> DNA
 <213> Homo sapiens

 <400> 717
 gcagttaacc aacacttggtg tggttctca 29

 <210> 718
 <211> 28
 <212> DNA
 <213> Homo sapiens

 <400> 718
 aatctttaaa tcgatgagca acctcact 28

 <210> 719
 <211> 33
 <212> DNA
 <213> Homo sapiens

 <400> 719

gcattcggtta accaactctt gtgtggttct cac 33

<210> 720
 <211> 59
 <212> DNA
 <213> Homo sapiens

<400> 720
 ctttaaactcg atgagcaacc tcactcttgt gtgcatcggt acagtagttt tccaattgg 59

<210> 721
 <211> 33
 <212> DNA
 <213> Homo sapiens

<400> 721
 gcattcggtta accaactctt gtgtggttct cac 33

<210> 722
 <211> 59
 <212> DNA
 <213> Homo sapiens

<400> 722
 ctttaaactcg atgagcaacc tcactcttgt gtgcatcggt acagtagttt tccaattgg 59

<210> 723
 <211> 54
 <212> DNA
 <213> Homo sapiens

<400> 723
 gcgcgcgtcg acaaaagagc tggttgtaag aacttcttct ggaagacttt cact 54

<210> 724
 <211> 60
 <212> DNA
 <213> Homo sapiens

<400> 724
 gcgcgcgcat cgatgagcaa cctcactctt gtgtgcatca caagaagtga aagtcttcca 60

<210> 725
 <211> 20
 <212> DNA
 <213> Homo sapiens

<400> 725
 tccaggagcg tcgacaaaag 20

<210> 726
 <211> 25
 <212> DNA
 <213> Homo sapiens

<400> 726
 agactttaaa tcgatgagca acctc 25

<210> 727
 <211> 35
 <212> DNA
 <213> Homo sapiens

<400> 727
 aagctgcctt aggcttagct ggttgtaaga acttc 35

<210> 728
 <211> 39
 <212> DNA
 <213> Homo sapiens

<400> 728
 cggccggggc ggccttaac aagaagtga agtcttcca 39

<210> 729
 <211> 206
 <212> DNA
 <213> Homo sapiens

<400> 729
 gcgcgcgtcg acaaaagatc tgctaactct aaccagcta tggctccaag agaaagaaag 60
 gctggttgta agaacgcgcg cgtcgacaaa agatctgcta actctaacc agctatggct 120
 ccaagagaaa gaaaggctgg ttgtaagaac gcgcgcgtcg acaaaagatc tgctaactct 180
 aaccagcta tggctccaag agaaag 206

<210> 730
 <211> 60
 <212> DNA
 <213> Homo sapiens

<400> 730
 gcgcgcgcat cgatgagcaa cctcactctt gtgtgcatca caagaagtga aagtcttcca 60

<210> 731
 <211> 39
 <212> DNA
 <213> Homo sapiens

<400> 731
 aagctgcctt aggcttatct gctaactcta acccagcta 39

<210> 732
 <211> 39
 <212> DNA
 <213> Homo sapiens

<400> 732
 cggccggggc ggccttaac aagaagtga agtcttcca 39

<210> 733
 <211> 33
 <212> DNA
 <213> Homo sapiens

<400> 733
 gcattcgtta accaactt gtgtggttct cac 33

<210> 734
 <211> 59
 <212> DNA
 <213> Homo sapiens

<400> 734
 ctttaaactg atgagcaacc tcactcttgt gtgcatcggt acagtagttt tccaattgg 59

<210> 735
 <211> 60
 <212> DNA
 <213> Homo sapiens

<400> 735
 gtttggaaca cactcacaga agagggttctt tggataagag attcggttaac caacacttgt 60

<210> 736
 <211> 27
 <212> DNA
 <213> Homo sapiens

<400> 736
 ctcccaaactc tttaaactga tgagcaa 27

<210> 737
 <211> 26
 <212> DNA
 <213> Homo sapiens

<400> 737
 gctaaacctt attcgaacaa gcaaag 26

<210> 738
 <211> 27
 <212> DNA
 <213> Homo sapiens

<400> 738
 ctgagcaaag gcaatcaaca ccaaggc 27

<210> 739
 <211> 38
 <212> DNA
 <213> Homo sapiens

<400> 739
 tagctattcg aaaacaagca aagatgaagt gggtaagc 38

<210> 740
 <211> 39
 <212> DNA
 <213> Homo sapiens

<400> 740
 tatcaaatgc ggccgcttat aagcctaagg cagcttgac 39

 <210> 741
 <211> 32
 <212> DNA
 <213> Homo sapiens

 <400> 741
 aggagcgtcg acaaaagagc cccgaggcgg gc 32

 <210> 742
 <211> 52
 <212> DNA
 <213> Homo sapiens

 <400> 742
 cttttaaactcg atgagcaacc tcactcttgt gtgcatcggg gccagcgggc gc 52

 <210> 743
 <211> 30
 <212> DNA
 <213> Homo sapiens

 <400> 743
 gcgcgcgtcg acaaaagagg tggttgtaag 30

 <210> 744
 <211> 60
 <212> DNA
 <213> Homo sapiens

 <400> 744
 gcgcgcgcat cgatgagcaa cctcactctt gtgtgcatca caagaagtga aagtcttcca 60

 <210> 745
 <211> 31
 <212> DNA
 <213> Homo sapiens

 <400> 745
 aagctgcctt aggcttagcc ccgagggcgg a 31

 <210> 746
 <211> 51
 <212> DNA
 <213> Homo sapiens

 <400> 746
 gcgcgcgttt aaacggccgg ccggcgcgcc ttattagggg ccagcgggcg c 51

 <210> 747
 <211> 32
 <212> DNA
 <213> Homo sapiens

<400> 747
 aagctgcctt aggcttaatg gaccttcttc aa 32

<210> 748
 <211> 51
 <212> DNA
 <213> Homo sapiens

<400> 748
 gcgcgcgttt aaacggccgg ccggcgcgcc ttattataac tcagactggg a 51

<210> 749
 <211> 32
 <212> DNA
 <213> Homo sapiens

<400> 749
 aagctgcctt aggcttaatg agcgggtgctc cg 32

<210> 750
 <211> 51
 <212> DNA
 <213> Homo sapiens

<400> 750
 gcgcgcgttt aaacggccgg ccggcgcgcc ttattaggag gctgcctctg c 51

<210> 751
 <211> 32
 <212> DNA
 <213> Homo sapiens

<400> 751
 aagctgcctt aggcttaatg gcttccagaa gc 32

<210> 752
 <211> 51
 <212> DNA
 <213> Homo sapiens

<400> 752
 gcgcgcgttt aaacggccgg ccggcgcgcc ttattatggg cggtacttgc a 51

<210> 753
 <211> 35
 <212> DNA
 <213> Homo sapiens

<400> 753
 cgcggatccc aggcctttgt gaaccaacac ctgtg 35

<210> 754
 <211> 71
 <212> DNA
 <213> Homo sapiens

<400> 754	
cttttaaattcg atgagcaacc tcactcttgt gtgcatcggt gcagtagttc tccagctggt	60
agagggagca g	71
<210> 755	
<211> 69	
<212> DNA	
<213> Homo sapiens	
<400> 755	
gtcaagctgc cttaggetta tttgtgaacc aacacctgtg cggtcacac ctggtggaag	60
ctctctacc	69
<210> 756	
<211> 70	
<212> DNA	
<213> Homo sapiens	
<400> 756	
gcgcgcggta ccctattagt tgcagtagtt ctccagctgg tagagggagc agatgctggt	60
acagcattgt	70
<210> 757	
<211> 25	
<212> DNA	
<213> Homo sapiens	
<400> 757	
gagtccaatt agcttcatcg ccaat	25
<210> 758	
<211> 25	
<212> DNA	
<213> Homo sapiens	
<400> 758	
agactttaaa tcgatgagca acctc	25
<210> 759	
<211> 25	
<212> DNA	
<213> Homo sapiens	
<400> 759	
gagtccaatt agcttcatcg ccaat	25
<210> 760	
<211> 25	
<212> DNA	
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 ctggaccacc accc 74

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<400> 801
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 <400> 813
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 <400> 815
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<400> 817
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<400> 818
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<210> 819
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<400> 819
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<210> 820
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<400> 820
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 20 25 30
 Ser Val Asn Leu Met Ala Asp Asp Thr Glu Ser Ala Phe Ala Thr Gln
 35 40 45
 Thr Asn Ser Gly Gly Leu Asp Val Val Gly Leu Ile Ser Met Ala Lys
 50 55 60
 Arg
 65

<210> 822
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<400> 822
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 20 25 30
 Ser Val Asn Leu Met Ala Asp Asp Thr Glu Ser Ala Phe Ala Thr Gln
 35 40 45
 Thr Asn Ser Gly Gly Leu Asp Val Val Gly Leu Ile Ser Met Ala Glu
 50 55 60
 Glu Gly Glu Pro Lys Arg
 65 70

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 20 25 30
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
 35 40 45
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
 50 55 60
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ala Ala Trp Asp Glu
 65 70 75 80
 Asp Leu Leu Asp Lys Phe Cys Thr Glu Leu Tyr Gln Gln Leu Asn Asp
 85 90 95
 Leu Glu Ala Cys Val Met Gln\Glu Glu Arg Val Gly Glu Thr Pro Leu
 100 105 110
 Met Asn Xaa Asp Ser Ile Leu Ala Val Lys Lys Tyr Phe Arg Arg Ile
 115 120 125

Thr Leu Tyr Leu Thr Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val
 130 135 140

Val Arg Ala Glu Ile Met Arg Ser Leu Ser Leu Ser Thr Asn Leu Gln
 145 150 155 160

Glu Arg Leu Arg Arg Lys Glu
 165

<210> 824

<211> 166

<212> PRT

<213> Homo sapiens

<400> 824

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 1 5 10 15

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 20 25 30

Asp Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Asp Gly Asn Gln
 35 40 45

Phe Gln Lys Ala Pro Ala Ile Ser Val Leu His Glu Leu Ile Gln Gln
 50 55 60

Ile Phe Asn Leu Phe Thr Thr Lys Asp Ser Ser Ser Thr Gly Trp Asn
 65 70 75 80

Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
 85 90 95

His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
 100 105 110

Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
 115 120 125

Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
 130 135 140

Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
 145 150 155 160

Thr Gly Tyr Leu Arg Asn
 165

<210> 825

<211> 21

<212> PRT

<213> Homo sapiens

<400> 825

Met Lys Val Ser Val Ala Ala Leu Ser Cys Leu Met Leu Val Thr Ala

1	5	10	15
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 <212> PRT
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<400> 826
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Ser Gly

<210> 827
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 827
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Ser Gly

<210> 828
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 828
 Met Phe Lys Ser Val Val Tyr Ser Ile Leu Ala Ala Ser Leu Ala Asn
 1 5 10 15

Ala

<210> 829
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 829
 Met Asn Ile Phe Tyr Ile Phe Leu Phe Leu Leu Ser Phe Val Gln Gly
 1 5 10 15

Leu Glu His Thr His Arg Arg Gly Ser Leu Asp Lys Arg
 20 25

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 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 830
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 1 5 10 15

Ser Val Ile Asn Tyr Lys Arg
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 <212> DNA
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 tgggtggttg caaatgacta attaagttag tcaaggcgcc atcctcatga aaactgtgta 180
 acataataac cgaagtgtcg aaaagggtggc accttgtcca attgaacacg ctcgatgaaa 240
 aaaataagat atatataagg ttaagtaaag cgtctgttag aaaggaagtt tttccttttt 300
 cttgctctct tgtcttttca tctactatit ccttcgtgta atacagggtc gtcagataca 360
 tagatacaat tctattaccc ccatccatac aatg 394

<210> 832
 <211> 12
 <212> PRT
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<400> 832
 Gly Tyr Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr
 1 5 10

<210> 833
 <211> 180
 <212> DNA
 <213> Homo sapiens

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 gaattcattg cttggttggt taagggtaga catggagagg gaacatttac atcagacgtc 120
 tcacatatt tagagggaca ggcagcaaaa gagtttatag catgggttagt aaaaggaaga 180

<210> 834
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 <212> PRT
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<400> 834
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 20 25 30

Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly Gln Ala Ala

35					40					45					
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50					55					60					
Phe	Thr	Ser	Asp	Val	Ser	Ser	Tyr	Leu	Glu	Gly	Gln	Ala	Ala	Lys	Glu
65					70					75					80
Phe	Ile	Ala	Trp	Leu	Val	Lys	Gly	Arg	Glu	Ala	His	Lys	Ser	Glu	Ile
				85					90					95	
Ala	His	Arg	Tyr	Asn	Asp	Leu	Gly	Glu	Gln	His	Phe	Lys	Gly	Leu	Val
			100					105					110		
Leu	Ile	Ala	Phe	Ser	Gln	Tyr	Leu	Gln	Lys	Cys	Ser	Tyr	Asp	Glu	His
	115						120					125			
Ala	Lys	Leu	Val	Gln	Glu	Val	Thr	Asp	Phe	Ala	Lys	Thr	Cys	Val	Ala
	130					135					140				
Asp	Glu	Ser	Ala	Ala	Asn	Cys	Asp	Lys	Ser	Leu	His	Thr	Leu	Phe	Gly
145					150					155					160
Asp	Lys	Leu	Cys	Ala	Ile	Pro	Asn	Leu	Arg	Glu	Asn	Tyr	Gly	Glu	Leu
				165					170					175	
Ala	Asp	Cys	Cys	Thr	Lys	Gln	Glu	Pro	Glu	Arg	Asn	Glu	Cys	Phe	Leu
			180					185					190		
Gln	His	Lys	Asp	Asp	Asn	Pro	Ser	Leu	Pro	Pro	Phe	Glu	Arg	Pro	Glu
		195					200					205			
Ala	Glu	Ala	Met	Cys	Thr	Ser	Phe	Lys	Glu	Asn	Pro	Thr	Thr	Phe	Met
	210					215					220				
Gly	His	Tyr	Leu	His	Glu	Val	Ala	Arg	Arg	His	Pro	Tyr	Phe	Tyr	Ala
225					230					235					240
Pro	Glu	Leu	Leu	Tyr	Tyr	Ala	Glu	Gln	Tyr	Asn	Glu	Ile	Leu	Thr	Gln
				245					250					255	
Cys	Cys	Ala	Glu	Ala	Asp	Lys	Glu	Ser	Cys	Leu	Thr	Pro	Lys	Leu	Asp
			260					265					270		
Gly	Val	Lys	Glu	Lys	Ala	Leu	Val	Ser	Ser	Val	Arg	Gln	Arg	Met	Lys
		275					280					285			
Cys	Ser	Ser	Met	Gln	Lys	Phe	Gly	Glu	Arg	Ala	Phe	Lys	Ala	Trp	Ala
	290					295					300				
Val	Ala	Arg	Leu	Ser	Gln	Thr	Phe	Pro	Asn	Ala	Asp	Phe	Ala	Glu	Ile
305					310					315					320
Thr	Lys	Leu	Ala	Thr	Asp	Leu	Thr	Lys	Val	Asn	Lys	Glu	Cys	Cys	His
				325					330					335	
Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	Arg	Ala	Glu	Leu	Ala	Lys	Tyr

340					345					350					
Met	Cys	Glu	Asn	Gln	Ala	Thr	Ile	Ser	Ser	Lys	Leu	Gln	Thr	Cys	Cys
		355					360					365			
Asp	Lys	Pro	Leu	Leu	Lys	Lys	Ala	His	Cys	Leu	Ser	Glu	Val	Glu	His
	370					375					380				
Asp	Thr	Met	Pro	Ala	Asp	Leu	Pro	Ala	Ile	Ala	Ala	Asp	Phe	Val	Glu
385					390					395					400
Asp	Gln	Glu	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu
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Gly	Thr	Phe	Leu	Tyr	Glu	Tyr	Ser	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val
			420					425					430		
Ser	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Lys	Tyr	Glu	Ala	Thr	Leu	Glu	Lys
		435					440					445			
Cys	Cys	Ala	Glu	Ala	Asn	Pro	Pro	Ala	Cys	Tyr	Gly	Thr	Val	Leu	Ala
	450					455					460				
Glu	Phe	Gln	Pro	Leu	Val	Glu	Glu	Pro	Lys	Asn	Leu	Val	Lys	Thr	Asn
465					470					475					480
Cys	Asp	Leu	Tyr	Glu	Lys	Leu	Gly	Glu	Tyr	Gly	Phe	Gln	Asn	Ala	Ile
				485					490					495	
Leu	Val	Arg	Tyr	Thr	Gln	Lys	Ala	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu
			500					505					510		
Val	Glu	Ala	Ala	Arg	Asn	Leu	Gly	Arg	Val	Gly	Thr	Lys	Cys	Cys	Thr
		515					520					525			
Leu	Pro	Glu	Asp	Gln	Arg	Leu	Pro	Cys	Val	Glu	Asp	Tyr	Leu	Ser	Ala
	530					535					540				
Ile	Leu	Asn	Arg	Val	Cys	Leu	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Glu
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His	Val	Thr	Lys	Cys	Cys	Ser	Gly	Ser	Leu	Val	Glu	Arg	Arg	Pro	Cys
				565					570					575	
Phe	Ser	Ala	Leu	Thr	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Lys
			580					585					590		
Ala	Glu	Thr	Phe	Thr	Phe	His	Ser	Asp	Ile	Cys	Thr	Leu	Pro	Glu	Lys
		595					600					605			
Glu	Lys	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Ala	Glu	Leu	Val	Lys	His
	610					615					620				
Lys	Pro	Lys	Ala	Thr	Ala	Glu	Gln	Leu	Lys	Thr	Val	Met	Asp	Asp	Phe
625					630					635					640
Ala	Gln	Phe	Leu	Asp	Thr	Cys	Cys	Lys	Ala	Ala	Asp	Lys	Asp	Thr	Cys

	645		650		655										
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Ala

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			20					25					30		
Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val	Ser	Ser	Tyr	Leu	Glu	Gly	Gln	Ala
		35					40					45			
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<210> 838
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59

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35 40 45
Ser Leu Ile Leu Ile Pro Gln Thr Trp Ser Asn Ala Glu Leu Ser Cys
50 55 60
Gln Met His Phe Ser Gly His Leu Ala Phe Leu Leu Ser Thr Gly Glu
65 70 75 80
Ile Thr Phe Val Ser Ser Leu Val Lys Asn Ser Leu Thr Ala Tyr Gln
85 90 95
Tyr Ile Trp Ile Gly Leu His Asp Pro Ser His Gly Thr Leu Pro Asn
100 105 110
Gly Ser Gly Trp Lys Trp Ser Ser Ser Asn Val Leu Thr Phe Tyr Asn
115 120 125
Trp Glu Arg Asn Pro Ser Ile Ala Ala Asp Arg Gly Tyr Cys Ala Val
130 135 140
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Asn Glu Leu Pro Tyr Ile Cys Lys Phe Lys Val
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<210> 841
<211> 23
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<400> 842

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<211> 16

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<211> 21

<212> PRT

<213> Homo sapiens

<400> 846

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Val Lys Ile Leu Lys
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<210> 847

<211> 36

<212> PRT

<213> Homo sapiens

<400> 847

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Val His Ser Ser Asn Asn Phe Gly Pro Ile Leu Pro Pro Thr Asn Val
20 25 30

Gly Ser Asn Thr
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<210> 848

<211> 7

<212> PRT

<213> Homo sapiens

<400> 848

Leu Gln His Phe Arg Trp Gly
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<210> 849

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<212> PRT

<213> Homo sapiens

<400> 849

Cys Asp Leu Pro Gln
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<211> 64

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<212> DNA

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 <212> DNA
 <213> Homo sapiens

<400> 857
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<210> 858
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 <212> PRT
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<400> 858
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 Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
 20 25 30
 Gly Gly Pro Gly Lys Arg
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